

**RARE
FOR CONSULTATION ONLY
INDIAN UNIVERSITIES COMMISSION,**

1902.

VOL. V.

MISCELLANEOUS PAPERS.



SIMLA :

PRINTED AT THE GOVERNMENT CENTRAL PRINTING OFFICE.

1902.

Extract from the Proceedings of the Government of India in the Home Department (Education),—under date Calcutta, the 27th January 1902.

READ—

Telegram to His Majesty's Secretary of State for India, No. 38, dated the 13th January 1902.

Telegram from His Majesty's Secretary of State for India, dated the 21st January 1902.

R E S O L U T I O N .

THE Governor General in Council has decided, with the concurrence of His Majesty's Secretary of State for India, to appoint a Commission to inquire into the condition and prospects of the Universities established in British India; to consider and report upon any proposals which have been, or may be, made for improving their constitution and working and to recommend to the Governor General in Council such measures as may tend to elevate the standard of University teaching, and to promote the advancement of learning.

2. The President of the Commission will be the Honourable Mr. T. Raleigh, Member of the Executive Council of the Governor General. The Members of the Commission will be the Honourable Syed Hossain Bilgrami, Nawab Imad-ul-Mulk Bahadur, B.A.; Mr. J. P. Hewett, C.S.I., C.I.E., Secretary to the Government of India in the Home Department; Mr. A. Pedler, C.I.E., F.R.S., Director of Public Instruction, Bengal; Mr. A. G. Bourne, D. Sc., F.R.S., Indian Educational Service, Acting Principal of the Presidency College, Madras; and the Reverend D. Mackichan, M.A., D.D., LL.D., Principal of the Wilson College, Bombay. During the visit of the Commission to each University centre a local Member will be temporarily attached for the purpose of the inquiry regarding the University in which he is interested. The local Members of the Commission will be the Honourable Mr. Asutosh Mukhopadhyay, M.A., D.L., for the Calcutta University; Mr. C. Sankaran Nayar, B.A., B.L., for the Madras University; the Honourable Mr. Justice N. G. Chandravarkar, B.A., LL.B., for the Bombay University; Mr. T. C. Lewis, M.A., Director of Public Instruction, North-Western Provinces and Oudh, for the Allahabad University; and Mr. W. Bell, M.A., Director of Public Instruction, Punjab, for the Punjab University. Mr. R. Nathan, of the Indian Civil Service, will be Secretary to the Commission.

3. The Commission will assemble at such time and in such place as the President may appoint. They will, in the first place, gather information and consult local opinion at the seat of each University and at any Colleges which they may elect to visit. On the completion of these local inquiries, they will proceed to Simla to consider their recommendations and prepare their report. The general conduct of the inquiry and the regulation of the course of business is entrusted to the President in communication with the Members. The Governor General in Council leaves it to the President to determine the procedure to be adopted in obtaining and recording evidence. The Commission, through their Secretary acting under instructions from the President, will correspond direct with the Universities, with Local Governments, and with any Educational Officers and local authorities with whom direct communication may be authorized by Local Governments as a matter of convenience and in order to save time. The Governor General in Council desires that all communications or requisitions for information emanating from the Commission may be treated as urgent and complied with promptly, and that, in the event of the Commission visiting a Province, they may be afforded every facility for their inquiries.

ORDER.—Ordered, that a copy of this Resolution be forwarded to the Local Governments noted in the margin for information and guidance, and to the Finance Department for information.

Madras.	
Bombay.	
Bengal.	
North-Western Provinces and Oudh.	
Punjab.	

Ordered also, that it be published in the Supplement to the *Gazette of India* for general information.

[True Extract.]

J. P. HEWETT,
Secretary to the Government of India.

may acknowledge that much good work has been done.

6. *Teaching Universities.*—It is agreed that the legal powers of the Universities were too narrowly drawn and interpreted, and that they should be empowered to make provision for teaching. The obvious difficulties are two: (1) lack of funds, and (2) the wide areas over which Colleges are scattered. It is clearly expedient to leave the Arts students in the main to the Colleges: but the University may arrange as its head-quarters for more advanced students, providing teachers, libraries, and laboratories as required, and also hostel accommodation. In this way strong central schools of Science and Law may be created, and to these schools the outlying Colleges should send their men. The advantage of this plan is, that it may be worked out gradually, without the great initial expense of creating a complete Professoriate.

It is agreed that teachers in the Colleges may be recognised by the University, and that a College, remaining free as at present to choose its teachers, may not unreasonably be required to submit names and qualifications to the University for approval.

The suggestion that the Presidency Colleges and the Muir Colleges should be turned into University Colleges seems open to objection. These Colleges are wanted for the work they now do, and while they should be maintained in high efficiency, it is not necessary to alter their character. We want not more Arts Colleges, but schools of Science and Law as above described.

7. *Spheres of influence.*—From the Acts of Incorporation it seems that a territorial division was intended. Four Universities affiliate Colleges only, in the Presidency or Province and Native States adjoining: Calcutta has Colleges in the Punjab, the United Provinces, Assam, Burma, the Central Provinces and Ceylon.

We may perhaps agree that the University should affiliate only where it can give the necessary supervision, and recommend the changes which would give effect to this principle. The case of Ceylon must be considered in consultation with the Colonial authorities.

8. *Proposed new Universities.*—Several witnesses look forward to the establishment of Universities at Bangalore, Trichinopoly, Trivandrum, Poona, Ahmedabad, Nagpur, Rangoon. There is perhaps nothing immediately practical in any of these schemes.

In regard to Burma, we may perhaps take the line of encouraging the Province

No.

FROM

J. P. HEWETT, Esq., C.S.I., C.I.E.,
Secretary to the Government of India,

TO

THE HONOURABLE MR. ASUTOSH MUKHOPADHYAY, M.A., D.L.
THE HONOURABLE MR. JUSTICE N. G. CHANDAVARKAR, B.A., LL.B.
MR. C. SANKARAN NAYAR, B.A., B.L.
T. C. LEWIS, Esq., M.A., DIRECTOR OF PUBLIC INSTRUCTION
IN THE NORTH-WESTERN PROVINCES AND OUDH.
W. BELL, Esq., M.A., DIRECTOR OF PUBLIC INSTRUCTION
IN THE PUNJAB.

Home Department.
Education.

Calcutta, the January 1902.

SIR,

THE Governor General in Council has appointed a Commission to visit the Universities of British India and to report upon the actual condition of the Universities and their affiliated Colleges and Institutions, and upon any suggestions which may be made for the improvement of their constitution and working.

The Commission is constituted as follows :—

PRESIDENT.

The Honourable Mr. T. Raleigh.

MEMBERS.

Permanent . . .	{	The Honourable Syed Hossain Bilgrami, Nawab Imad-ul-Mulk Bahadur, B.A.
		J. P. Hewett, Esq., C.S.I., C.I.E., Secretary to the Government of India, Home Department.
		A. Pedler, Esq., C.I.E., F.R.S., Director of Public Instruction in Bengal.
		A. G. Bourne, Esq., D.Sc., F.R.S., Indian Educational Service.
		The Reverend D. Mackichan, M.A., D.D., LL.D.
Local . . .	{	Calcutta . . . The Honourable Mr. Asutosh Mukhopadhyay, M.A., D.L.
		Madras . . . Mr. C. Sankaran Nayar, B.A., B.L.
		Bombay . . . The Honourable Mr. Justice N. G. Chandavarkar, B.A., LL.B.
		Allahabad . . . T. C. Lewis, Esq., M.A., Director of Public Instruction in the North Western Provinces and Oudh.
		Punjab . . . W. Bell, Esq., M.A., Director of Public Instruction in the Punjab.

The Government of India are already in possession of a considerable body of information in regard to the actual state of higher education in India, and

many suggestions have been received as to the changes which may, with advantage, be made in the present system. There is a very general demand that the powers of the older Universities should be enlarged, so as to render them capable of being teaching and not merely examining bodies. It has also been suggested that suitable regulations should be made for the election of Fellows; and that the constitution and powers of the Syndicate, in the three older Universities, should be placed on a statutory basis. With a view to the maintenance of the standard of teaching and discipline in affiliated Colleges, it has been represented that the Universities should be empowered and encouraged to exercise a closer supervision than is at present possible. Complaints are frequently heard as to the tendency of University Examinations to lower the aims and pervert the methods of education in Colleges, and it seems desirable that the courses of study now prescribed should be passed under review, and that the standards accepted in different Universities should be carefully compared.

Before deciding on any course of action, the Government of India think it right to take the advice of those who, as teachers or as members of governing bodies, have been actively engaged in University work.

The Commission will visit and report upon the five Universities of British India.

To assist the Commission in their inquiry, it has been decided to appoint a Local Commissioner at each of the five University centres. The duties of the Local Commissioner will be, to make known the objects of the inquiry among teachers and others concerned, to communicate to the President the names of those persons who ought in his opinion to be invited to give evidence and to invite his assent to their being summoned, and finally to sit with the Commission above named while they are inquiring into the condition and the needs of his own University and to assist them in conducting the investigation. He will not visit other Universities, nor will he be required to join in the preparation of the final Report.

The Governor General in Council has learned with satisfaction that you are
 able and willing to act as Local Commissioner for the University of Calcutta
Bombay
Madras
Allahabad
the Punjab.

The proceedings of the Commission will be conducted in public. But it will be open to any person to submit information in the form of a written statement to the President. It is not proposed by Government to publish the evidence in full.

I have the honour to be,

SIR,

Your most obedient Servant,

J. P. HEWETT,

Secretary to the Government of India.

NOTE OF POINTS TO BE CONSIDERED BY THE UNIVERSITY COMMISSION.

The following is a note of important points to which the inquiry of the Commission is being directed. The note is not meant to be exhaustive, and the Commission will be glad to hear witnesses speak with regard to any other points about which they may desire to give evidence.

2. *Historical Retrospect.*—The Commission will be glad to receive information in regard to ancient places of learning, not included in the present university system.

3. *Teaching Universities.*—The three older incorporating Acts are so framed as to suggest that the Universities were founded for the purpose of holding examinations and conferring degrees. Is it expedient to enlarge these provisions so as to make it clear that all our Universities are to be teaching bodies?

The London University (proposed as a model in the Despatch of 1854) was turned into a teaching University by the Commission appointed in the London University Act, 1898, and its new statutes provide for (1) Professors and lecturers appointed by the University, and (2) teachers in colleges, etc., who are recognised by the University. The formation of a list of recognised teachers was a work of some difficulty, but it was successfully accomplished by Lord Davey and his colleagues.

If it is decided that the Universities of India should be teaching Universities, it will be necessary to consider how far it is possible or expedient to provide for the appointment of University Professors and lecturers: whether it is possible or expedient to form a list of recognised teachers: whether candidates for degrees should be required to receive instruction from teachers appointed or recognised by the University. The Commission would like to hear the opinion of witnesses conversant with the subject on all these points.

4. *Spheres of Influence.*—The University of Calcutta holds examinations in several Provinces and Native States and in Ceylon. It is sometimes asked to affiliate institutions which might be provided for by other Universities.

Should each University have a sphere of influence? And should any local limit be placed upon the right to affiliate colleges?

5. *Constitution: the Senate.*—The original Senates of the Presidency Universities were comparatively small bodies, composed of persons qualified to advise on questions relating to the higher education. It is represented that these bodies have become too large, that many Fellowships have been given merely by way of compliment, and that only a small number of Fellows attend the meetings of the Senate. The Commission will consider these points, and whether it is expedient to give the Senate a more definite constitution by limiting the number, by prescribing the qualifications of persons to be appointed, or by providing that Fellowships shall be vacated by non-attendance at meetings.

At Allahabad and Lahore they will inquire whether experience has shown that any change is necessary.

Where the Senate or the graduates are allowed by statute or by rule to nominate a certain number of Fellows, the Commission desire to study the methods of election, and to ascertain what improvements, if any, seem to be required.

The Commission will also inquire whether it is considered that a change should be made in the tenure of Fellowships by making them terminable; and, if so, how the change should be carried out.

6. *The Syndicate*.—The Syndicate is an Executive Committee, constituted by the Senate. In the three older Universities, the Senate has acted in exercise of its general powers: in the case of Allahabad, there is a statutory power. The Commission will inquire in each case whether the number as at present fixed is suitable: whether Government and the colleges are adequately represented: whether it is desirable to place all the Syndicates on a statutory basis.

7. *Faculties and Boards of Studies*.—At Calcutta, the Senate is divided into the Faculties of Arts, Law, Medicine and Engineering. There are ten Boards of Studies, elected by the Faculty of Arts from among its own members. Every member of the Senate must be a member of one Faculty at least. The duties of the Faculties and Boards are mainly advisory; the Syndicate consults them on text-books and other matters within their respective departments.

It has been suggested that the Faculties should be strengthened by abrogating the rule that every Fellow must be assigned to a Faculty; and by adding recognised teachers and graduates with honours in the special subject of the Faculty. It is also suggested that, when Fellows are elected, the election should be by Faculties, not by the general body of graduates.

In each case the Commission wish to ascertain whether the Faculties and Boards, as at present constituted, are equal to the duties assigned to them.

8. *Graduates*.—The Commission wish for information as to whether, with a view to the election of Fellows, and possibly to the re-constitution of the Faculties, it is desirable that a Register of Graduates should be formed, and some provision made for keeping it up to date.

It is also for consideration whether universities should be empowered to confer the M.A. or other suitable degree on recognised teachers who come from other Universities. This is always done at Oxford and Cambridge when a Professor or high official is appointed from outside.

9. *Students of the University*.—When a candidate presents himself for examination, the University requires a certificate from his college. The small percentage of passes would seem to show that in some cases certificates are granted too easily.

It is not proposed to take the discipline of students away from the colleges. But it would seem desirable that the University should interest itself in the physical and moral welfare of the men, and should see that the colleges do their duty in these respects.

If we are to foster a genuine University life in the great towns, much importance attaches to societies and common pursuits which bring men of different colleges together. The Commission will inquire what attention is paid to this matter.

The Commission wish to learn the opinion of witnesses as to whether a minimum age limit should be fixed for candidates for the entrance or Matriculation examination.

10. *University Teaching*.—If the Universities are recognised as teaching bodies, they will be bound to see that due provision is made, through the colleges or otherwise, for all the subjects included in prescribed courses of study. There are the subjects which belong to the special Faculties of Law, Medicine and Engineering; those which belong to the Faculty of Arts may be roughly classified as follows:—

English, which is very important, as the medium of instruction in History and Science. It has been stated that many students begin their University course without sufficient knowledge of English to profit by the lectures they attend. Is this statement well founded; and, if so, how is this defect to be supplied?

Greek and Latin, as the basis of liberal education in Europe, must have their place in our Universities.

Classical Languages of the East: Sanskrit, Arabic, Persian, etc.

Vernacular Languages of India.

Mathematics.

Physics and Chemistry.—It has been stated that the instruction in these subjects is in many cases merely the imparting of book knowledge, and that there is not enough practical work.

Biology and Geology.

Mental and Moral Science.

History, Political Economy and Geography.

The Commission wish to collect information to enable them to form an estimate of the value of the teaching now given in these subjects.

It has been suggested that, without departing from our principles of toleration and respect for all the great religious systems of India, we may make provision for a School of Theology, to promote the comparative study of religions.

11. *Examinations.*—It will be necessary for the Commission to compare the requirements of different Universities, and to account for any variation in the standards adopted. The whole practice in regard to setting and looking over papers, tabulation of marks, allotment of grace-marks, etc., will be included in their inquiry. They will also inquire as to the arrangements for supervision of candidates, and for distribution of the papers, and they will compare the rules under which examiners and moderators are appointed.

12. *Registrar and Staff.*—At Calcutta, the question of making the Registrar a whole-time officer has more than once been raised. The pay and leave rules of the office staff have also been discussed. The prompt and safe despatch of examination papers can only be secured by employing a good staff, and it is desirable that the conditions of employment should be such as to attract a good class of men.

13. *Affiliated Colleges.*—The affiliation rules will be reviewed, to see whether they afford a guarantee that colleges are up to the mark when admitted, and that they are kept up to the mark after admission.

The Commission, or Sub-Committees of the Commission, will visit a certain number of colleges. To visit all is not possible in the time at their disposal.

The special problems connected with the working of (a) Government, (b) aided and (c) unaided colleges will be investigated during the inquiry.

The chief points that will be taken up in regard to colleges are (a) teaching staff : subjects taught and qualifications of teachers ; (b) students : communities to which they belong, etc. ; (c) buildings ; (d) constitution of governing body, and rules of the institution ; (e) finance : endowments, if any, and scale of fees ; (f) provision, if any, for physical and moral welfare of students.

Where two or more colleges are in the same town, or near one another, inquiry will be directed to the questions whether and how far combined lectures and other forms of co-operation are possible.

14. The rules under which schools are recognised will be reviewed, but the schools themselves, unless in some special cases, are not within the scope of the inquiry.

UNIVERSITIES COMMISSION.

INFORMATION SUPPLIED BY THE REGISTRARS
OF THE UNIVERSITIES.





सत्यमेव जयते

HEADS OF INFORMATION.

THE SENATE.—

- Number of Fellows named in Act of Incorporation.
- Maximum number at any time since Incorporation.
- Present number.
- Proportion of Europeans to Natives, officials to non-officials, residents to absentees.
- Method of election.
- Usual number of meetings per annum.
- Usual attendance.
- If there are elected Fellows state—
 - (a) when permission to elect was given,
 - (b) number of elected Fellows now holding office,
 - (c) constitution of electorate and method of election,
 - (d) academic standing, degrees and qualifications of the elected.

THE SYNDICATE.—

- Total number ; and number of Members engaged in teaching.
- Composition of the remainder.
- Usual number of meetings per annum.
- If there are non-resident Members state the distances at which they reside from the place of meeting.

THE FACULTIES.—

- Constitution. Is it necessary that each Fellow should belong to one of the Faculties?
- Number of Fellows belonging to each Faculty.
- Usual attendance at meetings of each Faculty.

GRADUATES.—

- Number of Graduates.
- State whether a Register is kept, and whether a fee is paid on entering names.
- Proportion of residents to non-residents.

EXAMINERS.—

- Are Teachers who prepare for the examination excluded?
- Are Members of the Syndicate excluded?
- Are Examiners always, or usually, Fellows or Graduates of the University for which they examine?
- To what extent is an interchange of Examiners, or examination by outsiders, carried on?
- To what extent are Moderators appointed to secure uniformity of standard?
- Scale of remuneration for setting and marking papers.

THE REGISTRAR.—

- Is he a whole-time Office, and, if not, what other duties does he perform?

THE STAFF.—

- Number of person employed in the Registrar's office.
- Are they subject to Regulations in respect of pay, leave, and promotion?

EXAMINATIONS.—

Give for each Degree Examination (from the Entrance upwards) of the last academic year the number of candidates, number who passed, and percentage of success and failure.

FINANCE.—

A summary statement, under headings, of the Receipts and Expenditure of the University for the last academic year: Receipts and Expenditure of Trust Funds being separately shown.



UNIVERSITY OF CALCUTTA.

THE SENATE—

(i) Number of Fellows named in the Act of Incorporation—40 (Calendar 1901, pages 13—15).

It is laid down in section VI of the Act of Incorporation, Act II of 1857, that “the whole number of the Fellows of the said University” (Calcutta University), “exclusive of the Chancellor and Vice-Chancellor for the time being, shall never be less than thirty; and whenever the number of the said Fellows, exclusive as aforesaid, shall by death, resignation, departure from India, or otherwise, be reduced below thirty, the Governor General of India in Council shall forthwith, by notification in the *Calcutta Gazette*, nominate so many fit and proper persons to be Fellows of the said University as, with the then Fellow of the said University, shall make the number of such Fellows, exclusive as aforesaid, thirty. But nothing herein contained shall prevent the Governor General of India in Council from nominating more than thirty persons to be Fellows of the said University if he shall see fit.”

(ii) Maximum number of Fellows since Incorporation—205 in the year 1896.

(iii) Present number, including the Vice-Chancellor and the *ex-officio* Fellows—181.

(iv) (a) Proportion of Europeans to Natives—

Europeans—73— $\frac{73}{181}$.

Natives—108— $\frac{108}{181}$.

(b) Proportion of officials to non-officials—

Officials—79 (including 19 Government pensioners).

Non-officials—102.

(c) Proportion of Residents to Absentees—

Residents—145.

Absentees (non-residents)—36.

(v) Method of Election—

Up to 1890 the Fellows were nominated solely by His Excellency the Governor General in Council. From 1891 to 1900 the Fellows were partly nominated by His Excellency the Governor General in Council and partly elected by the graduates of this University, subject to the final nomination by His Excellency. No new Fellows have been appointed since 1901 inclusive.

(vi) Usual number of meetings per annum—

(Average of meetings of last five years)—4.

(vii) Usual attendance.

(Average of last five years)—55.

(viii) Elected Fellows—

(a) In 1890 permission was given to fill up a portion of the then existing vacancies in the Senate by election of a certain number of Fellows by the graduates of this University from amongst themselves (Minutes, 1890-91, pages 36—37).

(b) Number of elected Fellows now holding office—21.

(c) Constitution of electorate and Method of election—

Constitution of Electorate.—There has been no fixed constitution of the Electorate. It will appear from Lord Lansdowne's demi-official letter to the Honourable Mr. Justice Gooroo Dass Banerjee, the then Vice-Chancellor, that

the election system was introduced only as a tentative measure (Minutes 1890-91, pages 336—337). The constitution of the Electorate for the year 1891 was thus specified by Lord Lansdowne in his letter above cited :—

* * * I would propose that the M.A.s and holders of corresponding degrees in the other Faculties of the University should be invited to choose from among themselves two gentlemen whom they would recommend for selection and whose names might be submitted to me * * * .

In 1891, the first year of election, owing to want of sufficient time, the M.A.s and holders of corresponding degrees in the other Faculties resident in Calcutta only were asked to take part in the election. Candidates for election were required to be holders of the degree of M.A., D.L. or M.D. Two Fellows were elected this year.

From 1892 up to 1900 the Registrar, at the direction of the Syndicate, used to report annually to the Government of India the vacancies in the Senate caused by death and retirement during the year, and at the same time requested the Government of India to inform the Syndicate whether there would be an election of Fellows by the graduates of this University that year, and, if so, to state the number of persons to be elected and the qualifications of the candidates for election as well as the qualifications of the electors.

In 1892 M.A.s and holders of corresponding degrees in the other Faculties of the University were permitted to elect two of their number to be Fellows subject to the approval of His Excellency the Chancellor (Minutes 1891-92, page 207, paragraph 219).

In 1893 the graduates of this University were allowed to elect three Fellows. One of those was required to be a Medical graduate of this University, who was either a Bachelor in Medicine of ten years' standing or the holder of a higher degree in Medicine, and the other two to be Masters or holders of some higher degrees in some Faculty or Bachelors of Arts who graduated before the year 1867. The electors were required to have the same qualifications as those required for candidates for the two Non-Medical Fellowships, *i.e.*, they were required to be Masters or holders of a higher degree in some Faculty or Bachelors of Arts who took that degree before the year 1867 (Minutes, 1892-93, page 394, paragraph 209).

In 1894, three Fellows were elected. Candidates for all the vacancies were required to be Masters or holders of higher degrees in some Faculty or Bachelors of Arts who graduated before the year 1867. These qualifications were also required from the electors. In granting permission for election this year, His Excellency the Chancellor expressed a hope that for at least one of the three vacancies a gentleman eminent for his services to Education and Literature would be selected (Minutes, 1893-94, pages 239—240, paragraph 209).

In 1895 permission was given to elect three Fellows. The same qualifications were required of the candidates for election and of the electors as in 1894 (Minutes 1894-95, page 255, paragraph 262).

In 1896 three vacancies in the Senate were allowed to be filled up by election. One of the elected candidates was required to be a graduate in Medicine of ten years' standing or the holder of a higher degree in Medicine, and the other two were required to be Masters or the holders of higher degrees in some Faculty or Bachelors of Arts who graduated before the year 1867. The electors were required to be Masters or holders of higher degrees in some Faculty or Bachelors of Arts who graduated before the year 1867 (Minutes, 1895-96, page 204).

In 1897 two of the vacancies in the Senate were allowed to be filled by election. Candidates for election as well as the electors were required to be Masters or holders of higher degrees in some Faculty or Bachelors of Arts who graduated before the year 1867 (Minutes, 1896-97, page 261).

In 1898 two of the vacancies were allowed to be filled up by election. The qualifications of candidates for election and those of the electors were required to be the same as in 1897 (Minutes, 1897-98, page 224, paragraph 298).

In 1899 two of the vacancies in the Senate were allowed to be filled by election. One of the candidates for election was required to be a Bachelor in

the Faculty of Engineering of ten years' standing or a holder of a higher degree in the same Faculty and the other to be a Master of Arts or a Bachelor of Arts who graduated before the year 1867. The electors were required to be either Masters or holders of a higher degree in some Faculty or Bachelors of Arts who graduated before the year 1867 (Minutes, 1898-1899, page 214, paragraph 245).

In 1900 two of the vacancies were allowed to be filled up by election. The candidates for election were required to be either Masters of Arts or Bachelors of Arts who graduated before the year 1867, and the electors were required to be Masters or holders of a higher degree in some Faculty or Bachelors of Arts who graduated before the year 1867 (Minutes, 1899-1900, page 221, paragraph 290).

Method of Election.—Immediately on receipt of intimation from the Government of India that there would be an election of Fellows by the graduates of this University, the Registrar, by direction of the Syndicate, used to write to the Secretary to the Government of India in the Home Department requesting him to issue instructions to the Government of Bengal and to all Magisterial and Judicial officers in the other Provinces as well as in the several Native States to record the votes of the graduates of this University, qualified to vote, who were unable to attend the Senate House to take part in the election of Fellows. A notice of election (copy annexed) stating the number of Fellows to be elected, the qualifications of the candidates for election as well as those of the electors, the place, date, and hour of election and instructions regarding the mode of filling in the voting papers and getting them properly countersigned, was published in the *Calcutta Gazette* and the *Gazette of India*. A form of voting paper (copy annexed) was also annually prescribed by the Syndicate, a copy of which was forwarded to every qualified voter who applied for it. The election was held on the 1st of January each year. After all the votes were received and recorded by the Registrar in a Register, a pole was taken and the result of election was communicated to the Secretary to the Government of India in the Home Department for information of His Excellency the Chancellor.

(d) Academic standing, degrees and qualifications of the elected—

- (1) Babu Jogendra Chandra Ghose—B.A., 1881, 2nd Division; M.A., 1882, in English, Class II, stood 4th in the list; B.L., 1883, in the 1st Division and stood 5th in the list; M.A. of 8 years' standing and was practising as a Vakil of the Calcutta High Court for about six years when elected. Lord Lansdowne in his Convocation speech referred to him in the following terms:—"He is a gentleman of cultivated tastes, and has done his country and the literary world good service by editing, with an excellent introduction, the scattered writings of the Indian Reformer Ram Mohan Ray."
- (2) Babu Mohendra Nath Ray, M.A., B.L.—B.A., 1883, stood first in 1st class; M.A. in Mathematics, 1884, first class, first in the subject; B.L. in 1885; was an M.A. of 6 years' standing at the time of election. In his Convocation speech Lord Lansdowne spoke of him in the following terms:—"He is one of the most distinguished graduates of the University. His academic career was exceptionally brilliant; he stood first at the F.A., first at the B.A. and first in his own subject at the M.A. Examination, and he won some of the most important scholarships, prizes and medals that are competed for at the Arts Examinations. He is now one of the lecturers on Higher Mathematics in the City College and in the Indian Association for the Cultivation of Science."
- (3) Pandit Prannath Saraswati, M.A., B.L.—M.A., in 1874, in 2nd Class, in Sanskrit; B.L. in 1876; Tagore Law Professor, 1891; died 1892; was an eminent Pleader of the High Court and author of several works in Bengali; obtained the title of Saraswati for his proficiency in Sanskrit.

- (4) Babu Upendranath Mitra, M.A., B.L.—M.A., 1863; B.L., 1862; was appointed Tagore Law Professor in 1882; was gold medalist of his year and served for several years as Law Lecturer in the Dacca Government College; author of a standard work on a legal subject; an eminent practising Vakil of the High Court.
- (5) Dr. Nilratan Sircar, M.A., M.D.—obtained the degree of M.B. in 1888; stood first in the list; obtained Honours in Midwifery and Medical Jurisprudence; University gold medallist; M.A. in Physiology and Zoology, 1889, in the 2nd class, stood first in his subject; M.D. in 1890; was a medical graduate of six years' standing at the time of election.
- (6) Babu Ramcharan Mitra, M.A., B.L.—B.A., 1867, in the 2nd Division; M.A. with Honours in Mathematics, 3rd class, in 1868; B.L., 1869, 2nd Division; was junior Government Pleader, High Court, Calcutta, at the time of election; now Senior Government Pleader, High Court, Calcutta; was appointed Tagore Law Professor in 1896.
- (7) Babu Norendralal De, M.A., B.L.—B.A. in 1880 in 2nd Division; M.A., 1880; B.L., 1886, in the 2nd Division; was a professor in the General Assembly's Institution, of some years' standing at the time of election.
- (8) Babu Hrambo Chandra Maitra, M.A.—B.A., 1879, 3rd class; M.A. in English, 1880, with 1st class Honours, stood first in the list; University gold medallist; Senior Professor of English in the City College, Calcutta, at the time of election.
- (9) Babu Srischandra Chaudhuri, M.A., B.L.—B.A., 1870; M.A., 1871, with 2nd class Honours in English, stood first in the list; B.L., 1873, 2nd Division; Vakil, High Court, Calcutta.
- (10) Babu Ramendra Sundar Tribedi, M.A.—B.A. in 1886 with 1st class Honours in Physics and Chemistry; M.A. in 1887 in the 1st class, stood first in the list; University gold medallist; Premchand Roychand student, 1888; Monah medallist; Senior Professor of Science, Ripon College, Calcutta.
- (11) Babu Devaprasad Sarbadhikari, M.A., B.L.—B.A., 1882, in the 2nd Division; M.A., 1883, in English in the 2nd class, stood second in the list; B.L., 1884, in the 2nd Division; Vakil, High Court, Calcutta.
- (12) Babu Bhupendranath Bose, M.A., B.L.—B.A., 1879, in the 2nd Division; M.A., in 1880, in English in the 2nd class; B.L., 1883, in the 2nd Division; Vakil and Attorney-at-Law, High Court.
- (13) Babu Nrisinhachandra Mukerjee, M.A., B.L.—B.A., 1866; M.A., 1867, in Sanskrit with 2nd class Honours; B.L., 1869, in the 2nd Division; author of several Bengali and Sanskrit works; F.R.G.S.
- (14) Dr. Suresprasad Sarbadhikari, M.D.—M.B., 1889, in the 1st Division, stood third in the list; Honours in Medicine and Surgery, 1889; M.D., 1891; Practising Physician.
- (15) Rai Jatindranath Chaudhuri, M.A., B.L.—B.A., 1885; M.A., 1886, in Philosophy in the 2nd class; B.L., 1888, in the 2nd Division.
- (16) Babu Lalbihari Mitra, M.A., B.L.—M.A., 1882, in English in Class III; B.L., 1883; was a Pleader of the High Court; died in 1900.
- (17) Babu Adharchandra Mukerjee, M.A., B.L.—B.A., 1883; M.A. in 1884 in English; B.L., 1887; Professor of History and Logic in the General Assembly's Institution; Author of "A Short History of India," a text-book in History for the Entrance Examination of this University.

- (18) Babu Guruprasad Sen, M.A., B.L.—M.A., 1864; B.L., 1865; was a member of the Bengal Legislative Council for some years; died in 1900.
- (19) Babu Dwarka Nath Chakrabarti, M.A., B.L.—B.A., 1880, in the 2nd Division, M.A., 1883; B.L., 1882, in the 2nd Division; Vakil, High Court.
- (20) Babu Jogendranath Sen, M.A., B.L.—B.A., 1883, in the 2nd Division, M.A., 1884; B.L. 1888, in the 2nd Division; Professor, Central College, Calcutta, and Vakil, High Court.
- (21) Babu Gobinda Chandra Das, M.A., B.L.—B.A., 1879, in the 2nd Division; M.A., 1880, with 1st Class Honours in Physical Science; second in the list. Silver medallist. B.L., 1883, 1st Division, Professor, Ripon College, and Vakil, High Court, Calcutta.
- (22) Babu Haripada Ghoshal, B.C.E.—L.C.E., 1881, 3rd in the list. The degree of B.C.E. was conferred on him on his passing the F.A. Examination in 1882.
- (23) Babu Jogen Chunder Dutt, M.A., B.L.—B.A., 1883, 2nd Division; M.A., 1884, with 1st Class Honours in English and stood 1st in the list. University gold medallist. B.L. in 1886. Vakil and Attorney-at-Law, High Court, Calcutta.
- (24) Babu Jyotiprasad Sarbadhikari, M.A., B.L.—B.A., 1884, in the 1st Division; M.A., 1885, in English in the 2nd Class; B.L., 1887, in the 2nd Division; Vakil, High Court, Calcutta.

THE SYNDICATE—

- (a) The Syndicate of the Calcutta University consists of the Vice-Chancellor and ten of the Fellows, who are annually elected by the several Faculties in the following proportions :—

Five by the Faculty of Arts.
Two by the Faculty of Law.
Two by the Faculty of Medicine.
One by the Faculty of Engineering.

Four members of the present Syndicate are engaged in teaching.

- (b) Composition of the six remaining members—

- (1) Director of Public Instruction, Bengal.
- (2) Three are practising Pleaders of the High Court.
- (3) One Attorney-at-Law, High Court.
- (4) One practising physician.

- (c) Usual number of meetings per annum—12.

- (d) There are no non-resident members on the Syndicate. Bye-Law No. 4 relating to the Syndicate distinctly lays down that all members of the Syndicate must be resident in or near Calcutta.

THE FACULTIES—

- (a) Constitution—

The Bye-Laws relating to the Faculties are as follow :—

1. The Senate shall be divided into four Faculties, namely, Arts, Law, Medicine, and Engineering. Every member of the Senate shall be a member of one Faculty at least, and any member of the Senate may be a member of more than one Faculty.
2. The Faculties shall be appointed by the Senate at its annual meeting.
3. Each Faculty shall elect its own President. Every meeting of a Faculty shall be convened by its President or, in his absence, by the Senior Fellow belonging to the Faculty.

4. If any Faculty omit to elect a President before the annual meeting of the Senate, or, in case the office should become vacant during the year, to elect a President for the rest of the year, within one month after the vacancy occurs, the Vice-Chancellor may appoint any member of such Faculty to be its President.

5. Three members of any Faculty shall constitute a quorum of that Faculty.

(b) The number of Fellows belonging to each Faculty is as follows :—

Faculty of Arts	139
Faculty of Law	55
Faculty of Medicine	18
Faculty of Engineering	24

(c) Usual attendance at meetings of each Faculty—

Faculty of Arts	40
Faculty of Law	20
Faculty of Medicine	10
Faculty of Engineering	8

GRADUATES—

(a) Number of graduates in Arts :—

M.A.'s	1,634
B.A.'s	7,244

Number of graduates in Law :—

D.L.'s	7
Honours in Law	8
B.L.'s	3,750

Number of graduates in Medicine :—

M.D.'s	9
Honour in Medicine	40
M.B.'s	131

Number of graduates in Engineering :—

B.C.E.'s	28
B.E.'s	66

(b) No separate register is kept of the Graduates of this University except the lists which are published in the Calendar, and no fee is charged on entering names.

(c) Proportion of resident to non-resident graduates :—

In the absence of a register for recording the addresses of the graduates, the above information cannot be supplied.

EXAMINERS—

(a) Under rule 2 of the General Rules for Examinations, page 148, Calendar 1901, no person can be appointed to set a paper in a subject of which he teaches the whole or a part, but this rule does not preclude a teacher in any subject from looking over the answer papers of candidates in the subject, nor does this rule prevent a teacher of a subject from setting papers in a subject for an examination other than that for which he teaches. Thus a professor teaching B.A. mathematics is not precluded from setting papers in mathematics for any examination of this University other than the B.A.

(b) Members of the Syndicate are not excluded from being appointed examiner, but whenever so appointed, they get no remuneration for their work.

(c) Examiners of this University are usually selected from among the Professors of Colleges affiliated to it. Generally speaking, only those Fellows who are on the teaching staff of some affiliated

institution are appointed Examiners. Appointments to Examiners are not always or usually confined to the Fellows of this University.

In appointing Examiners preference is usually given to the graduates of this University, but in the case of higher examinations, such as the B.A. and M.A., the services of European Professors are to a great extent made use of.

(d) Whenever necessary, persons unconnected with this University either as its graduates, or its Fellows, or as members belonging to the teaching staff of an institution affiliated to it, are appointed Examiners. Thus Dr. Bourne, of Madras, and Mr. Homersham Cox, of Allahabad, are frequently appointed Examiners for some of the higher examinations of this University.

(e) Moderators are appointed for the Entrance and F. A. Examinations, and the mode in which they act are set forth in the following rule :—

The papers in English, Mathematics, and History and Geography for the Entrance Examination, and in English and Sanskrit, Mathematics, and Elementary Physics and Chemistry for the First Examination in Arts, shall be moderated. Three persons shall be appointed a Board of Examiners to set each of the papers in the abovenamed subjects. The duty of two of them shall be to set the paper allotted to them, in consultation with each other at a meeting, and the duty of the third, who shall be appointed by the Syndicate on the recommendation of the Board of Studies concerned, and shall be designated "Moderator," shall be to revise in consultation with the other members of the Board, at a meeting, the paper set, all points of difference being decided by a majority of votes. The paper thus set and revised shall be submitted to the Registrar with a certification, over their joint signatures, that it conforms to the prescribed condition, and does not involve a variation from the average standard.

When two or more persons are appointed to set papers in any subject for the F.A., B.A., B.Sc., or M.A. Examination, it shall be their joint duty, wherever possible, to moderate the papers set by them in consultation with each other, and to see that the papers set by them conform to the conditions laid down by the University for such examination, and that the standard of questions set remains approximately uniform from year to year (Calendar, 1901, page 149).

(f) Scale of remuneration for setting and marking papers—

Entrance Examination.

	R	a.	p.
Fee for moderating a paper in English, Mathematics, or History and Geography	75	0	0
Fee of each Examiner for setting a paper on any one of the above-named subjects and settling it in consultation with each other and with the Moderator	75	0	0
Setting an Examination paper	25	0	0
Examining an answer paper—			
(1) in Arithmetic and Algebra	0	8	0
(2) in translation or Geography	0	10	0
(3) in other subjects	0	12	0
Translating and re-translating 2nd English paper	25	0	0
Head Examiner's fee*	350	0	0

F. A. Examination.

Fee for moderating a paper in English, Sanskrit, Mathematics, or Elementary Physics and Chemistry	90	0	0
Fee of each Examiner for settling a paper on any one of the above-named subjects and settling it in consultation with each other and with the Moderator	90	0	0
Setting an Examination paper	40	0	0
Examining an answer paper	1	0	0

* The fee of a Head Examiner for re-examining an answer paper is equal to the fee allowed for examining it.

The remuneration to be paid to a Head Examiner in any subject for the work of re-examining the answer papers is limited to the amount which will be due to him for examining 5 per cent. of the papers in that subject.

B. A. and B. Sc. Examinations.

	<i>R</i>	<i>a.</i>	<i>p.</i>
Setting a Pass paper	60	0	0
*Setting an Honour paper	80	0	0
Examining a Pass paper	1	8	0
*Examining an Honour paper	2	0	0

M. A. Examination.

Setting a paper	100	0	0
Examining a paper	3	0	0
Practical Examination of each candidate	5	0	0

Premchand Roychand Examination.

Setting a paper in any subject	100	0	0
Examining an answer paper	5	0	0

Honours in Law Examination.

Setting a paper	100	0	0
Examining a paper	2	8	0

B. L. Examination.

Setting a paper	80	0	0
Examining a paper	2	8	0

Preliminary Scientific and First I. M. S. Examinations.

Setting a paper	50	0	0
Oral Examination	5	0	0
Practical Examination	5	0	0
Examining a paper	2	0	0

Second I. M. S. Examination.

Setting a paper	70	0	0
Oral Examination	5	0	0
Practical Examination	5	0	0
Examining a paper	2	0	0

Preliminary Scientific and First M. B. Examinations.

Setting a paper	0	0	0
Oral Examination	5	0	0
Practical Examination	5	0	0
Examining a paper	2	0	0

Second M. B. Examination.

Setting a paper	80	0	0
Oral Examination	5	0	0
Practical Examination	5	0	0
Examining a paper	3	0	0

Honours in Medicine and M. D. Examinations.

Setting a paper	100	0	0
Oral Examination	5	0	0
Practical Examination	5	0	0
Examining a paper	5	0	0

* The remuneration for setting and examining the 4th Honour paper in Chemistry is fixed at half the ordinary amounts. The remuneration for conducting the Practical Examination in Chemistry is fixed at Rs5 for each candidate with a minimum of Rs50.

F. E. Examination.

	<i>R</i>	<i>a.</i>	<i>p.</i>
Setting a paper	60	0	0
Examining a paper	1	8	0
Examining Projects, Designs and Drawings, for each set	6	0	0

L. E. and B. E. Examinations.

Setting a paper	80	0	0
Examining a paper	2	8	0
Examining Projects, Designs and Drawings, for each set	25	0	0

If an examiner is appointed to look over answers to a paper or papers that he has not himself set, the fee paid to him shall not be less than half the fee paid for setting the paper or papers.

THE REGISTRAR—

The Registrar is not a whole-time officer. The present Registrar is also the Principal of the Presidency College, Calcutta.

THE UNIVERSITY STAFF—

(a) Besides the Registrar, there is one Assistant Registrar and six Assistants in the University Office.

(b) They are not subject to the Civil Service Regulations in respect of pay, leave and promotion.

EXAMINATIONS—

The following table shows the examinations of the last Academic year, the number of candidates, the number who passed and the percentage of success at each examination :—

Names of Examinations.	Number of candidates.	Number passed.	Percentage of successful candidates.
Entrance Examination	6,135	3,307	53·9
First Examination in Arts	3,722	1,209	32·4
B.A. Examination	1,980	374	18·8
M.A. Examination	209	86	41·1
B.L. Examination	610	233	38·1
Prel. Sci. L.M.S. Examination	101	23	22·7
First L.M.S. Examination	89	42	47·1
Second L.M.S. Examination	157	80	50·9
Prel. Sci. M.B. Examination	113	26	23·008
First M.B. Examination	11	6	54·5
Second M.B. Examination	10	3	30·
F.E. Examination	34	11	32·3
B.E. Examination	32	9	28·1
Prem Chand Roy Chand Studentship Examination	8	1	12·8

Finance—

A statement of receipts and expenditure of the general Fee Fund and the several Endowment Funds of the University for the year ending 30th June 1901 is enclosed.

A. C. EDWARDS,
Registrar, Calcutta University.

SENATE HOUSE; }
The 7th February 1902. }

APPENDIX—ELECTION OF FELLOWS.

“CALCUTTA UNIVERSITY.

NOTICE.

His Excellency the Chancellor has decided to allow the Masters or holders of a higher degree in some Faculty and Bachelors of Arts *who graduated before the year 1867* to fill up two vacancies in the Senate by election. The candidates for election must be either Masters of Arts or Bachelors of Arts who graduated before the year 1867.

The election will take place at the Senate House, College Square, on Monday, the 1st January 1900.

Every candidate for election must be nominated by a Master or a holder of a higher degree in some Faculty or a Bachelor of Arts who took his *degree before the year 1867*, and no graduate will be allowed to nominate more than one candidate. The written nominations of candidates must reach the office of the Registrar not later than the 10th December.

On and after the 12th December, voting papers containing the names of the candidates nominated will, on application, be supplied by the Registrar. These papers must be filled up in the presence of the Registrar at the Senate House on the 1st January 1900, between the hours of 10 A.M. and 5 P.M.; but graduates who are not able to appear in person before the Registrar may fill up the papers in the presence of a Magistrate, a Judge, Subordinate Judge, or a Munsiff (excluding Village Munsiffs), by whom the papers will be countersigned. All voting papers, duly signed and countersigned as aforesaid, must reach the Registrar not later than 3 P.M. on Monday, the 1st January 1900, after which no voting paper will be accepted. Graduates who are not personally known to the officer in whose presence the voting papers are filled up must bring with them their Diplomas or other satisfactory proof of identity.”

“CALCUTTA UNIVERSITY.

ELECTION OF FELLOWS, 1900.

Names of Candidates voted for—

- 1.
- 2.

Signature of voter

Degree, and year in which it was obtained

Countersignature of officer in whose presence the vote is recorded.

Date _____ 1899.

Official Designation.

This paper must be filled up in the presence of the Registrar, at the Senate House, on the 1st January 1900, between the hours of 10 A.M. and 5 P.M. Graduates who are unable to appear in person at the Senate House may fill up the paper in the presence of an officer of the rank of Magistrate, Judge, Subordinate Judge, or Munsiff (excluding Village Munsiffs), by whom the papers must be countersigned. In the absence of an officer of the rank of Magistrate in a Native State, the voting paper must be signed in the presence of the Chief Minister or the Chief Magisterial Officer of the State. A person exercising the functions of a Magistrate, Judge, Subordinate Judge, or a Munsiff, is not competent to countersign his own voting paper. Graduates who are not personally known to the officer in whose presence the voting paper is filled up must bring with them their Diplomas or other satisfactory proof of identity. Voting papers reaching the Registrar's office after 3 P.M., on the 1st of January 1900, will not be counted.

The names of the candidates proposed for election are printed on the back of this form.

Holders of one of the following Degrees, M.A., D.L., and M.D., and Bachelors of Arts who *graduated before the year 1867*, are entitled to vote for two candidates. *A voter can give only one vote to one candidate.*

UNIVERSITY OF MADRAS.

THE SENATE—

Number of Fellows named in Act of Incorporation.	Forty-two including the Chancellor.
Maximum number at any time since Incorporation.	201 in August 1901. ×
Present number.	189.
Proportion of Europeans to Natives, Officials to non-officials, residents to absentees.	Europeans 104, Natives 85, Officials 111, non-officials 78, residents 108, absentees 81.
Method of appointment.	Nomination by His Excellency the Governor.
Usual number of meetings per annum.	Six on an average.
Usual attendance.	Sixty members.
If there are elected Fellows:	Yes.
When permission to elect was given.	Government Order dated the 27th February 1893, No. 155.—Educational.
Number of elected Fellows now holding office.	16.
Constitution of electorate and method of election.	Masters of Arts, Masters of Laws, Doctors of Medicine, Bachelors of Arts, Laws, Medicine and Engineering of twenty years' standing.

The following rules relating to the election of fellows by graduates of the university have been framed by the Syndicate :—

1. Candidates for election as Fellows of the University of Madras shall be proposed and seconded by existing Fellows present at the Annual Meeting of the Senate, which, during the current academical year, will be held on Saturday, the 31st August, 1901.

2. The names of candidates duly proposed and seconded if eligible under paragraph 5, which is quoted below (of G. O., dated 27th February, 1893, No. 155, Educational) shall be published in the *Port St. George Gazette* in the month of September.

3. At the same time the qualifications of graduates entitled to vote shall be specified, and voters will be requested to apply to the Registrar for voting papers.

4. Each graduate entitled to vote shall give his vote for not more than two candidates. While a voter may vote for only one candidate, he shall not give more than one vote to the same candidate. Any voting paper containing the names of more than two candidates will be rejected.

5. A voter residing in Madras shall record his vote personally at the Senate House in the presence of the Registrar on a day and at an hour in November to be hereafter notified. A voter not residing in Madras and who is unable to attend at the Senate House in person shall fill in his voting paper in the presence of a Magistrate (not being a village Magistrate), a Judge, a Subordinate Judge, or a District Munsiff, who will authenticate it with his signature and shall despatch it in a registered cover to the Registrar, so as to reach him not later than the day before that fixed for voting at the Senate House.

Extract from G. O., dated 27th February, 1893, No. 155, Educational.

“5. With regard to the qualifications of candidates for appointment as Fellows and of electors, the Government is disposed to think that the field from which candidates may be selected should be as wide as possible; His Excellency in Council will not, therefore, prescribe any qualifications for candidates except that, if they happen to be members of the Madras or any other Indian University, they must be Masters of Arts or Law or Doctors of Medicine, or else Bachelors of Arts, Laws, Medicine or Engineering of not less than twenty years' standing and that all candidates must be proposed and seconded by existing Fellows of the University. On the other hand, the following classes of persons only will be permitted to vote—

- (i) Master of Arts of the Madras University ;
- (ii) Ditto of Law ditto.
- (iii) Doctors of Medicine ditto.
- (iv) Bachelors of Arts ditto.
- (v) Ditto of Laws ditto.
- (vi) Ditto of Medicine and Masters in Surgery of the Madras University ;
- (vii) Bachelors of Civil Engineering of the Madras University ;

provided also that no person belonging to the last four clauses will be permitted to vote unless he took his degree at least twenty years before the date of the election.”

Academic standing, degrees and qualifications of the elected.

1. Rao Bahadur C. Nagoji Rau, B. A. Inspector of Schools.
2. B. Hanumanta Rau, B.A., Professor of Mathematics, College of Engineering, Madras.
3. J. M. Hensman, B.A., Lecturer, Government College, Kumbakonum.
4. K. Kalyanasundara Aiyar, B.A., B.L., Vakil, Tanjore.
5. L. C. Williams Pillai, B.A., Ag. Inspector of Schools.
6. P. Rangaiya Naidu, retired Vakil.
7. N. Subba Rau, B.A., B.L., Vakil Rajahmundry.
8. P. Tyagaraya Chettiyar, B.A., Merchant.
9. M. R. Ramakrishna Aiyar, B.A., B.L., High Court Vakil, Madras.
10. K. Subrahmanya Aiyar, B.A., L.T., Headmaster, Byramjee Jeejeeboy Parsi Charitable Institution, Bombay.
11. A. Sitarama Aiyar, B.A., retired judge.
12. A. Periaswami Mudaliyar, B.A., District Registrar, S. Arcot.
13. J. M. Velu Pillai, retired Educational officer.
14. P. S. Ganapati Aiyar, B.A., Deputy Collector, Saidapet.
15. M. Viswanatha Aiyar, B.A., B.L., District Munsiff, Cuddalore.
16. T. Sankara Rau, B.A., Professor, Government College, Rajahmundry.

THE SYNDICATE—

Total number ; and number of members engaged in teaching.

Composition of the remainder.

Usual number of meetings per annum.

If there are non-resident members, etc.

Nine including the Vice-Chancellor; four engaged in teaching.

Vice-Chancellor, Director of Public Instruction, Inspector of Schools, Administrator-General and High Court Vakil.

Fourteen.

None.

THE FACULTIES—

Constitution. Is it necessary that each Fellow should belong to one of the Faculties.

Number of Fellows belonging to each Faculty.

Usual attendance at meetings of each Faculty.

1. Arts, Law, Medicine, and Engineering.

2. Yes.

Arts 145, Law 41, Medicine 18, Engineering 16.

Arts 40, Law 12, Medicine 7, Engineering 4.

GRADUATES—

Number of graduates.

State whether a register is kept, and whether a fee is paid on entering names.

Proportion of residents to non-residents.

6,091.

List of graduates printed in Volume II of the Calendar. No fee is demanded for entering their names.

This information will be furnished in due course.

EXAMINERS—

Are teachers who prepare for examination excluded.

Are members of the Syndicate excluded.

Are examiners always, or usually, Fellows or graduates of the University for which they examine.

To what extent is an interchange of examiners or examination by outsiders carried on.

Not.

Except in special cases.

A number of graduates of the University are always selected.

To a slight extent only.

To what extent are moderators appointed to secure uniformity of standard. No general system of moderation. The Boards of Examiners moderate in their own subjects only.

Scale of remuneration for setting and marking papers.

Matriculation Examination.

	Rs.	As.
Setting a question paper	50	0
Valuing each answer paper—		
English, Sanskrit, Greek, Latin, Arabic, Persian, French, German	0	12
Hindustani, Tamil, Telugu, Kanarese, Malayalam, Uriya, Marathi, Burmese, Geography	0	8
Arithmetic, Algebra	0	6
Geometry, Physics, Chemistry, History	0	10

First Examination in Arts.

	Rs.	As.
Setting a question paper	70	0
Valuing each answer paper—		
English, Sanskrit, Greek, Latin, Arabic, Persian, French, German	1	4
Geometry, Trigonometry, Physiology, Physiography, History	1	2
Algebra, Hindustani, Tamil, Telugu, Kanarese, Malayalam, Uriya, Marathi	1	0

B.A., M.A. and L.T. Degree Examinations.

	Rs.	As.
Setting a question paper	100	0
Valuing each answer paper	2	0

The above rates for setting and valuing papers are for three-hour papers, and papers of shorter duration are remunerated proportionately.

One-half the above rates are allowed for setting Translation papers, and no fee is awarded for setting Essay papers.

Practical Examinations except L.T.

Rs. 2 per candidate to each Examiner, subject to a minimum fee of Rs. 20 per hour to each Examiner.

L.T. Degree Practical Examination.

Rs. 50 per diem to each Examiner.

Medical Examinations.

L.M. and S. Examination.

	Rs.	As.
Setting a question paper	80	0
Valuing each answer paper	1	8

M.B. and C.M. Examination.

	Rs.	As.
Setting a question paper	100	0
Valuing each answer paper	2	0

L.S. Sc. Examination.

	Rs.	As.
Setting a question paper	100	0
Valuing each answer paper	2	0

The above rates for setting and valuing papers are for three-hour papers, and papers of shorter duration are remunerated proportionately.

*Practical and oral Examinations.**First L.M. and S.*

	Rs. As.
Oral	1 8

Second L.M. and S. and M.B. and C.M.

	Rs. As.
Jurisprudence and Hygiene	1 0
Oral	2 0
Clinical	3 0

Subject to a minimum fee of Rs. 20 per hour to each Examiner.

THE REGISTRAR—

Is he a whole-time officer, etc. **Yes.**

THE STAFF—

Number of persons employed in the Registrar's Office. **Six.**

Are they subject to Regulations in respect of pay, leave and promotion. **Civil Service Regulations as far as practicable.**

EXAMINATIONS—

Table showing the number of candidates registered, examined, and passed at all the examinations held during the year 1900-1901.

EXAMINATIONS.	Registered.	Examined.	Passed.	Percentage passed.
Matriculation	7,420	7,318	1,428	19.5
First examination in Arts	2,138	2,089	868	41.5
English Language	904	856	354	41.4
B.A. { Second do	693	669	539	80.6
Science	832	765	394	51.5
M.A.	41	36	19	52.8
L.T. { Written	108	104	70	67.3
Practical	147	114	51	58.1
First examination in Law	801	280	158	56.4
B.L.	353	328	141	42.9
M.L.	3	2	1	50.0
First L.M. and S.	20	18	13	72.2
Second do (Old Regns.)	8	7	...	...
Final L.M. and S.	2	2	...	...
First M.B. and C.M. (New Regulations)	35	35	16	45.7
Second M.B. and C.M. (Old Regulations)	15	15	9	60.0
" (New Regns.)	14	14	11	78.9
Third M.B. and C. M.	6	6	...	...
First examn. in Engineering	23	22	13	59.0
B.E. { Civil Branch	4	4	3	75.0
Mechanical Branch	5	4	3	75.0
TOTAL	13,072	12,688	4,086	32.2

[illegible]

Endowments.

The amount of funded capital and the present cash balance to the credit of each endowment account are shown below :—

No.	Names.	Funded capital.	Cash Balance.		
		Rs.	Rs.	As.	P.
1	Travancore Scholarship	14,800	384	0	4
2	Governor's Scholarship	8,800	242	8	10
3	Madhava Rau's Prizes	2,600	87	15	2
4	Cochin Scholarship	13,700	359	0	5
5	Sri Goday Vari Prize	1,000	2	1	1
6	Johnston of Carnsalloch Scholarship	3,200	409	7	2
7	Norton Prize	2,600	76	15	11
8	Arni Gold Medals	2,400	108	14	11
9	Hobart Prize	2,600	32	9	6
10	Rama Rau Medal	1,600	24	9	0
11	Rama Aiyangar Scholarship	3,200	58	5	11
12	Miller Gold Medal	1,700	76	11	8
13	Carmichael Prize	1,000	20	14	5
14	Innes Prize	1,000	38	2	10
15	Christian College Medal	1,700	40	12	9
16	Muniswami Chetti Medal	2,100	73	7	8
17	Raja Sir Ramaswami Medal	1,500	27	8	0
18	Northwick Prize	1,700	9	7	11
19	Balfour Memorial Medal	1,500	103	7	3
20	Franklin Gell Medal	1,500	27	3	3
21	Marsh Prize	1,400	44	12	0
22	Caithness Prize	2,800	24	1	10
23	General Macdonald Gold Medal	1,400	31	12	0
24	Krupabai Satyanathan Memorial Medal	1,200	48	9	8
25	Fischer Gold Medal	1,500	10	0	0
26	Ramal Aiyengar M.A. Scholarship	10,400	431	13	10
27	Jubilee Medal	1,400	82	7	9
28	Grigg Memorial Medal	2,000	79	0	0
29	Anne Isabella Subrahmanyam Scholarship	18,500	517	10	8
30	Rao Bah. M.A. Singaraachariyar Prize	2,000	104	0	0
31	Sir T. Muttuswami Aiyar Scholarship	10,500	3	4	0
32	Muttuswami Aiyar Memorial Scholarship	9,900	711	14	5
33	Kerala Varma Medal	1,500	70	9	7
34	Maharaja of Travancore's Curzon Prize.	14,700	0	0	0

SENATE HOUSE ;
The 6th February 1903. }

C. A. PATERSON,
Registrar.

UNIVERSITY OF BOMBAY.

THE SENATE—

Number of Fellows named in the Act of Incorporation is 28 excluding the Chancellor.

Maximum number at any time since Incorporation was 333 in 1897-98.

Present number is 293—

		(February 1902.) percentage.
Natives	188	64·16
Europeans (including 12 Portuguese, or Goanese, 1 Jew and 2 Eurasians).	105	35·84
Officials (including retired and Native State officials) .	150	51·19
Non-officials	143	48·81
*Residents in Bombay	193	65·87
Residents in Mofussil of Bombay Presidency . .	90	30·72
Absentees (<i>i.e.</i> , those residing in India outside the Presidency of Bombay).	10	3·41

Method of Election—Since 1893, 2 are recommended every year by graduates of certain standing for election and the rest are nominated by Government.

†Usual number of meetings per annum is 7.

Usual average attendance of last 3 years is 44.

Elected Fellows—

- (a) Permission to elect was given in 1892 and the first election took place in December 1892, the gentlemen elected being appointed by Government in January 1893.
- (b) Number of elected Fellows now holding office is 17 excluding one whose appointment was cancelled by His Excellency the Governor of Bombay in Council in accordance with section VII of the Act of Incorporation.
- (c) Constitution of Electorate and Methods of Election (*vide* copy of rules at present in force herewith marked A). Up to 1899 only those graduates who had obtained the highest existing degree in any Faculty or who had obtained two degrees (one of which was in the Faculty of Arts) were entitled to vote. Since January 1900 all graduates of 10 years' standing are also electors.
- (d) Academic standing, degrees and qualifications of the elected (*vide* List herewith, marked B).

THE SYNDICATE—

Total number 15.

Number of members engaged in teaching, 3.

Composition of the remainder—

- 2 are Judges of the Bombay High Court.
- 1 is the Director of Public Instruction, Bombay Presidency.
- 2 are Medical Practitioners.
- 2 are Superintendents of Government Observatories.
- 2 are practising Advocates.
- 1 is Chairman of the Bombay Port Trust.
- 1 is Executive Engineer, Bombay Municipality.
- 1 is Registrar of the High Court, Appellate Side.

Usual number of meetings per annum is 9. Occasionally extra meetings are held for the disposal of urgent business.

* NOTE.—Residents of Bombay temporarily absent on leave or otherwise are entered as residents.
 † This number includes adjourned meetings also.

Non-resident members.—There are two non-resident members both of whom reside at Poona (120 miles from Bombay). One of them, however, the Director of Public Instruction, visits Bombay on duty.

THE FACULTIES—

Constitution.—There are four Faculties, viz, of Arts Law, Medicine and Civil Engineering.

Each Fellow must belong to at least one Faculty and may be a member of more than one Faculty.

Number of Fellows belonging to each Faculty—

Arts	207
Law	77
Medicine	68
Engineering	48

Of these 110 belong to the Arts Faculty only.

8	Law
55	Medical
21	Engineering Faculty only.
68	Arts and Law Faculties.
9	Arts and Medicine Faculties.
17	Arts and Engineering Faculties.
2	Arts, Medicine and Engineering Faculties.
1	Arts, Law and Engineering Faculties.
2	Medicine and Engineering Faculties.

TOTAL **293**

Usual attendance at meetings of each Faculty—

Arts	65
Law	40
Medicine	15
Civil Engineering	12

GRADUATES—

* Number of Graduates, 3,930 approximately.

Details are as under—

LL. D.	3
M. A.	200 (all of whom are B.A.'s)
B.A.	2,922
B.Sc.	90 (of whom 11 are B.A.'s and 9 M.A.'s).
LL.B.	722 (of whom 722 are B.A.'s or B.Sc.'s).
M.D.	5 (all of whom are L.M. & S.'s).
L.M. & S.	551 (of whom about 15 are B.A.'s and 4 B.Sc.'s).
M.C.E.	1
L.C.E.	406 (of whom about 16 are B.A.'s and 6 B.Sc.'s).
L.Ag.	4

4,919

Deduct from this—

200 M.A.'s, all of whom are B.A.'s.
 20 B.Sc.'s who are M.A.'s or B.A.'s.
 722 LL.B.'s who are B.A.'s or B.Sc.'s.
 5 M.D.'s who are L.M. & S.'s
 19 B.A.'s and B.Sc.'s who are L.M. & S.'s.
 23 B.A.'s, B.Sc.'s, and M.C.E., who are L.C.E.'s.

989

4,919 - 989 = 3,930.

No Register is kept of Graduates.—Their names are, however, permanently shown in the calendar. No fee is charged on entering names.

Proportion of Residents to Non-residents.—As no Register is kept it is impossible to give information as to whether they do or do not reside in Bombay.

* Those who are taking their Degree at the ensuing Convocation on the 18th instant have not been included, but their numbers are—B.A., 238; B.Sc., 6; M.A., 12; LL.B., 142; L.M. & S., 28; L.C.E., 35; L.Ag., 1; Total 462.

EXAMINERS—

Only such Teachers as prepare candidates for the Matriculation and School Final Examinations are precluded from examining at those examinations. There is no such restriction upon Professors of Colleges.

Members of the Syndicate are never appointed Examiners unless exceptional circumstances render their appointment necessary.

[The Syndicate resolved at their meeting on the 27th January 1882 on the motion of the then Vice-Chancellor Mr. Justice West "that it be a rule of the Syndicate that no member of their body shall be appointed as an Examiner except in the absolute default of a competent person."]

In a vast majority of cases Examiners are either Fellows or Graduates of the University, in many cases both combined.

There is no interchange of Examiners.

Outsiders are appointed Examiners very rarely; generally in one or two subjects at the M.A. Examination.

Moderators are appointed in a few subjects at the Matriculation and School Final Examinations only [generally in English, Mathematics, History and Geography (at Matriculation only) and Gujarati at both the Examinations]. In some cases one of the Examiners at a particular examination is also appointed a Moderator at the same examination.

Scale of remuneration for setting and marking papers (*vide* printed scale marked C herewith). This scale was adopted only last year. Prior to that an entirely different scale of remuneration was in force a copy of which also is attached herewith and marked D. The present scale (*viz.*, the one marked C) has been adopted as a tentative measure only and is subject to modification.

THE REGISTRAR—

He is not at present a full-time officer. In addition to his duties as Registrar (*vide* page 26 of the calendar for 1901-1902) the present Registrar is a Professor of Biology at the Elphinstone and Grant Medical Colleges and Curator of the Victoria and Albert Museum.

THE STAFF—

The Clerical establishment consists of an Assistant Registrar, an Accountant and Cashier and four clerks.

The Menial establishment consists of eight peons including a Havaldar and a Naik.

The posts of the clerical establishment are all graded and the staff is granted leave according to rules obtaining in all Government offices.

Examinations, 1901.

Examinations.	Number of candidates.	Number of successful candidates.	Number of plucked candidates.	Percentage of pass.	Percentage of failure.
Matriculation	3,731	1,218	2,513	32·64	67·36
Previous	816	443	373	54·28	45·72
Intermediate Arts . . .	559	309	250	55·27	44·73
Intermediate Science . .	14	5	9	35·71	64·29
B.A.	384	238	146	61·97	38·03
B.Sc.	6	6	<i>Nil</i>	100	<i>Nil</i>
M.A.	33	12	21	36·36	63·64
First LL.B.	295	125	170	42·37	57·63
Second LL.B.	216	142	74	65·74	34·26
First L.M. & S.	157	104	53	66·24	33·76
Second do.	169	90	79	53·25	46·75
L.M.&S.	62	28	34	45·16	54·84
F.Ag.	12	6	6	50	50
S.Ag.	3	2	1	66·66	33·34
L. Ag.	2	1	1	50	50
F.C.E.	60	40	20	66·66	33·34
S.C.E.	49	31	18	63·26	36·74
L. C. E.	35	35	<i>Nil</i>	100	<i>Nil</i>

The italicised are Degree Examinations.

FINANCE.—(*Vide* printed statement marked E.)

APPENDICES : A. ELECTION OF FELLOWS.

Notification of the University of Bombay, No. 1540 of 1900-1901.

I.—Election of two Fellows of the University of Bombay in January 1901 in pursuance of Government Resolution No. 357 and of Government letter No. 359 of the 18th February 1892.

His Excellency the Governor of Bombay in Council having signified his intention, in pursuance of Government Resolution No. 357 and of Government letter No. 359 of the 18th February 1892, to permit certain Graduates of the University of Bombay to elect two Graduates of a certain standing with a view to their nomination by Government as Fellows of the University, an election of two Graduates will accordingly be held in January next in accordance with the following rules :—

1. All Graduates of the University of Bombay of not less than ten years' standing will be eligible for election under these rules and will be the only persons eligible.

2. The election will be held in the Sir Cowasjee Jehanghier Hall on Monday the 28th January 1901, between the hours of 3 and 6 o'clock P.M.

3. All Graduates of the University of Bombay who have obtained the highest existing decree in any Faculty, or who have obtained two degrees, one of which shall be in the Faculty of Arts, or who, having obtained one degree only, are graduates of not less than ten years' standing, will be entitled to vote at such election, and will be the only persons entitled to vote thereat.

4. An electoral roll showing the names and degrees of all electors qualified to vote under Rule 3 will be prepared in the Registrar's Office and will be there open for inspection by all members of the Senate, and all electors, on and from Thursday the 6th of December, and till the date of election. In the event of any omission or mistake therein being discovered not less than two days before the day of election, the Registrar is authorised to rectify the said roll. At the time of election the electoral roll will be placed on the table in the Sir Cowasjee Jehanghier Hall, where it will be signed by every elector voting in person, before he records his vote. In the case of electors who do not attend the election in person, the Registrar, on receipt of a voting paper from any such elector, will, as soon as may be, record the fact of such receipt in the electoral roll against the name of the elector whose voting paper is so received.

5. Candidates for election must be proposed and seconded by persons qualified as electors under Rule 3. Every proposal must be in writing and must be signed by the proposer and seconder and be sent, either by post or otherwise, so as to reach the Registrar at his office not later than Friday the 4th January 1901. All proposals duly received under this Rule will be notified in the *Bombay Government Gazette* of Thursday the 10th of January 1901, and in the newspapers specified below at as early a date as may be practicable :—

The Times of India.
The Bombay Gazette.
The Advocate of India.
The Indu Prakash.
The Rast Goftar.
The Native Opinion.

The Jam-e-Jamshed.
The Gujarati.
The Kaisar-i-Hind.
The Sudharak.
The Bombay Samachar.
The Bombay Vaibhava.

6. Each elector will be entitled to two votes, but he should not record more than one vote for each of two candidates. If two votes are recorded by one elector for the same candidate, such votes will be reckoned as one vote. If the elector record more than two votes, his votes will be cancelled by the Registrar, and the fact of such cancellation, together with a short statement of the reason thereof, will be noted by the Registrar in the electoral roll against the name of the elector whose voting paper is so cancelled.

7. The election will be by means of voting papers, which must be signed by electors resident in the City of Bombay at the time and place of election in the presence of the Registrar, and must set forth the degree or degrees of the elector and the name of each candidate voted for.

8. Voting papers must be signed by electors resident beyond the limits of the City of Bombay, who do not wish to attend in person at the time and place of election, in the presence of a Magistrate,* by whom such papers will be authenticated under orders which have been issued by the Government. Such voting papers must contain the particulars specified in Rule 7 in respect of voting papers signed by resident electors and should be sent in envelopes, with the words "voting papers" written thereon, so as to reach the Registrar not later than the time of election.

9. Voting papers which do not contain the requisite particulars or are not received before 6 o'clock P.M., on the day of election will be cancelled by the Registrar, and the fact of such cancellation, together with a short statement of the reason thereof, shall be noted by the Registrar in the electoral roll against the name of the elector whose voting paper is so cancelled.

10. All valid voting papers received before 6 o'clock P.M. on the day of election will at 6 o'clock P.M. be scrutinized by the Registrar in the presence of such of the proposers of candidates as are present, and the Registrar after completing the scrutiny will forthwith report to the Syndicate the names of the two candidates who have received the highest number of votes; and such candidates shall be deemed to have been duly elected.

11. If an equality of votes is found to exist between any two or more candidates and the addition of a vote would entitle any of those candidates to be declared elected, the determination of the candidate or candidates to whom such one additional vote shall be deemed to have been given will be made by lot, to be drawn by the Registrar in such manner as he may determine. The result of such drawing by lot will be final and conclusive.

12. The decision of the Registrar in any case coming under the provisions of Rule 10 and Rule 11 shall be final and conclusive.

13. On the result of the election being so reported as aforesaid, the voting papers will be destroyed.

14. The Syndicate, after the result of such election shall have been so reported as aforesaid, will report to and for the consideration of His Excellency the Governor in Council the names of the two candidates who shall have been duly elected under these rules.

By order of the Vice-Chancellor,

D. MACDONALD, M.D., B.Sc., C.M.,

University Registrar.

Bombay, 17th October 1900.

B

LIST OF ELECTED FELLOWS.

1893.

Erachshah Framji Sethna, L.M. & S. (1878).

Jamietram Nanabhai, B.A. (1882), LL.B. (1885).

1894.

Rustam K.R. Kama, B.A. (1880), LL.B. (1883).

† Bal Gangadhar Tilak, B.A. (1877), LL.B. (1880).

1895.

Chimanlal Harilal Setalvad, B.A. (1884), LL.B., (1887).

Narayan Vishnu Gokhale, B.A. (1885), LL.B. (1887).

* The voting papers of Graduates residing in Native States in this Presidency may be filled up in the presence of a British Officer in the Political Department not lower in rank than a Thanadar exercising Magisterial powers or they may be filled up in the presence of a Magistrate of a Native State whose signature should be authenticated by the countersignature of a Political Officer not lower in rank than an Assistant Political Agent or Deputy Assistant Political Agent.

† Cancelled in 1897.

1896.

The Honourable Mr. G. K. Gokhale, B.A. (1885).

Manchhashankar Jivan Ram, Vakil, B.A. (1880), LL.B. (1884).

1897.

Kaliandas Keshavdas Modi, B.A. (1887).

Rao Saheb Nilkanth Vinayak Chattrre, B.A. (1876), L.C.E. (1878).

1898.

Damodar Ganesh Padhye, M.A. (1888), H.A. (1886).

Manekji Dorabji Kanga, B.A. (1881), LL.B. (1885).

1899.

The Honourable Mr. Hari Sitaram Dikshit, B.A. (1883), LL.B. (1886).

Kavasji Edalji Dadachanji, L.M. & S (1880).

1900.

Matubhai Kasanbhai Atmaram-Bhukhanvala, B.A. (1888), LL.B. (1891).

Bhikaji Edalji Ghasvala, L.M. & S (1885).

1901.

Govind Balaji Kher, L.M. & S. (1886).

Narayan Machav Samarth, B.A. (1890), LL.B. (1895).

C

THE PRESENT SCALE OF REMUNERATION TO EXAMINERS (SUBJECT TO MODIFICATION).

THE FOLLOWING IS THE SCHEME OF REMUNERATION SANCTIONED BY
THE SYNDICATE:—

I.—EXAMINATIONS OTHER THAN THE M.A. AND M.D. EXAMINATIONS.

(a)—*Written Examinations.*

N.B.—The fees under this head are single fees, one fee only being payable in respect of each question paper drawn up, each attendance at the Printing Press for correcting a proof or proofs, superintending each written examination, and each answer paper examined. Where there are two or more Examiners, the above work must be divided among them in accordance with the letter of instructions.

	Fees.		
	R	a.	p.
1. Drawing up a three hours' question paper—			
(a) At U.S.F., Matriculation, Previous, First LL.B., First L.M. & S., F.Ag. and F.C.E. Examinations .	50	0	0
(b) At Intermediate Arts, Intermediate Science, Second L.M. & S., S.Ag. and S.C.E. Examinations	75	0	0
(c) At B.A., B.Sc., Second LL.B., L.M. & S., L.Ag. and L.C.E. Examinations	100	0	0
2. Drawing up a two hours' question paper	33	0	0
3. Attending at Printing Press to correct a proof or proofs of a paper	15	0	0
4. Supervising Written Examination	30	0	0
5. Examining three hours' answer paper at Examinations included in group (a), (b) and (c) R1, R1-8 and R2, respectively.			
6. Examining two hours' answer paper	0	12	0
7. Translating an English passage into a Vernacular for the paper in English at Matriculation and School Final .	25	0	0

(b)—Oral, Practical and Clinical Examinations.

N.B.—The fees under this head are payable severally to any *two* Examiners who are colleagues, when there are more Examiners than one appointed in the same subject.

EXAMINING EACH CANDIDATE ORALLY.

	<i>R.</i>	<i>a.</i>	<i>p.</i>
1. In Languages at B.A.	2	0	0
2. In Model Drawing at School Final	2	0	0
3. In Geology, Physics,* Chemistry,* Zoology, Veterinary at S. Ag., Animal Physiology and Practical Toxicology	3	0	0
4. In Botany and Materia Medica	3	0	0
5. In Anatomy and Veterinary at L. Ag.	3	0	0
6. In Medicine	5	0	0
7. In Midwifery	5	0	0
8. In Surgery	6	0	0
9. In Engineering and Engineering Drawing	5	0	0
10. In Surveying and Levelling	6	0	0
11. In Agriculture	6	0	0

(or a minimum of R25).

(c)—The minimum remuneration in respect of *one appointment* is R100.

(d)—To a dissector at the Practical Examination in Anatomy at the second examination in Medicine per subject dissected: R20. The whole amount not to exceed R45.

(e)—To an Assistant to the Examiners at the Practical Examination in Physiology: † R45; Zoology: † R10; Medical Jurisprudence, etc.: R5; Chemistry: † R25; Materia Medica: R5.

II.—M.A * AND M.D. †

	<i>R.</i>	<i>a.</i>	<i>p.</i>
1. Drawing up a paper	125	0	0
2. Attending at Printing Press to correct a proof or proofs of a paper	15	0	0
3. Supervising written examination	30	0	0
4. Examining each answer paper	3	0	0

N.B.—Nos. 1, 2, 3 and 4 are *single* fees as in the previous case.

To an assistant at the Practical Examination in Natural Science at the M.A.: R20.

By order,

D. MACDONALD, M.D., B.Sc., C.M.,

University Registrar.

D

OLD SCALE OF REMUNERATION TO EXAMINERS.

THE FOLLOWING IS THE SCHEME OF REMUNERATION SANCTIONED BY THE SYNDICATE:—

I.—EXAMINATIONS OTHER THAN THE M.A., M.D., AND SECOND LL.B. EXAMINATIONS.

(a)—Written Examinations.

N.B.—The fees under this head are single fees, one fee only being payable in respect of each question paper drawn up, each attendance at the Printing Press for correcting a proof or proofs, superintending each written examination,

* In addition to the usual remuneration a special fee of R25 will be paid to each Examiner in Physics and in Chemistry for the Practical Examination in those subjects at the B.Sc. and M.A. Examinations.

† For all the examinations comprising the group, and not for each.

‡ Except in the case of the Examiners in Comparative Anatomy at M.D. These will be paid at the ordinary rates. (Subject to Modification.)

It is under consideration whether this scale is not too high.

and each answer paper examined. Where there are two or more Examiners, the above work must be divided among them in accordance with the letter of instructions.

	Fees.		
	R	a.	p.
1. Drawing up a three hours' question paper	50	0	0
2. Drawing up a two hours' question paper	33	0	0
3. Attending at Printing Press to correct a proof or proofs of a paper	15	0	0
4. Supervising written Examination	15	0	0
5. Examining three hours' answer paper	0	12	0
6. Examining two hours' answer paper	0	8	0
7. Translating an English passage into a vernacular for the paper in English at Matriculation and School Final	25	0	0

(b)—*Oral, Practical and Clinical Examinations.*

N.B.—The fees under this head are payable severally to any *two* Examiners who are colleagues, when there are more Examiners than one appointed in the same subject.

EXAMINING EACH CANDIDATE ORALLY.

	R	a.	p.
1. In Languages	1	8	0
2. In Model Drawing at School Final	3	0	0
3. In Geology, Physics, * Chemistry, * Zoology, Veterinary at S.Ag., Animal Physiology and Practical Toxicology	3	0	0
4. In Botany and Materia Medica	3	0	0
5. In Anatomy and Veterinary at L.Ag.	4	0	0
6. In Medicine	5	0	0
7. In Midwifery	5	0	0
8. In Surgery	6	0	0
9. In Engineering and Engineering Drawing	6	0	0
10. In Surveying and Levelling	6	0	0
11. In Agriculture	6	0	0

(or a minimum of R25).

(c)—The minimum remuneration in respect of *one appointment* is R100.

(d)—To a dissector at the Practical Examination in Anatomy at the Second Examination in Medicine per subject dissected : R20. The whole amount not to exceed R45.

(e)—To an assistant to the Examiners at the Practical Examination in Physiology : † R45 ; Zoology : † R10 ; Medical Jurisprudence, etc. : R5 ; Chemistry : † R25 ; Materia Medica : R5.

II.—M.A.* AND M.D.†

	R	a.	p.
1. Examiner's fee	100	0	0
2. Drawing up a paper	50	0	0
3. Attending at Printing Press to correct a proof or proofs of a paper	15	0	0
4. Examining each answer paper	1	0	0

N.B.—Nos. 2, 3 and 4 are *single* fees as in the previous case.

To an assistant at the Practical Examination in Natural Science at the M.A. : R20.

III.—SECOND LL.B.

	R	a.	p.
Examiner's fee	500	0	0

By order,

D. MACDONALD, M.D., B.Sc., C.M.,
University Registrar.

* In addition to the usual remuneration a special fee of R25 will be paid to each Examiner in Physics and in Chemistry for the Practical Examination in those subjects at the B.Sc. and M.A. Examinations.

† For all the examinations comprising the group, and not for each.

‡ Except in the case of the Examiners in Comparative Anatomy at M.D. These will be paid at the ordinary rates.

NOTIFICATION OF THE UNIVERSITY OF BOMBAY, No. 2182 D. W. 1901-02

University Accounts.

The following Accounts of the University of Bombay for the year 1900-01 (which have been audited by the Board of Accounts) are published by direction of the Syndicate :—

Annual Account of Receipts and Disbursements of the General Fund of the University of Bombay for the year 1900-01.

Dr.

Cr.

Receipts.	Amount.	Total Amount.	Disbursements.	Amount.	Total Amount.
	<i>R a. p.</i>	<i>R a. p.</i>		<i>R a. p.</i>	<i>R a. p.</i>
To Cash Balance in the Bank of Bombay on 1st April 1900.	51,871 6 0		By Establishment Charges .	...	13,613 12 2
„ Cash Balance in the Office .	200 0 0		„ Examinations Charges .	...	72,987 7 4
		52,071 6 0	<i>Contingent Charges.</i>		
„ Fees from Candidates for the Examinations.	1,18,476 0 0		By Advertisements and Notifications.	7,607 4 2	
„ Sale-proceeds of University Calendars, Forms, etc.	1,522 4 6		„ Postage and Telegram Charges.	576 0 0	
„ Interest on Government Promissory Notes, etc.	9,950 0 0		„ Lighting Charges . . .	73 11 9	
„ Contribution towards Pension Fund.	113 14 0		„ Godown Rent . . .	600 0 0	
„ Contribution from certain Trust Funds at 5 per cent. of their annual income.	1,250 12 5		„ Repairs to the University Buildings.	283 14 1	
„ Hire of Robes	52 8 0		„ Charges at different Centres of the Matriculation and U. S. F. Examinations and of Stationery, Furniture, etc.	19,449 13 11	
„ Interest on Sir Charles Sergeant Memorial Fund.	311 8 0		„ Refund of Fees, Bank's Commission, Deposit and Renewal fees, etc.	349 10 6	
		1,31,676 14 11	„ Cash Balance in the Bank of Bombay on 31st March 1901.	*68,091 4 0	28,940 6 5
		1,83,748 4 11	„ Cash Balance in the Office .	115 7 0	1,15,541 9 11
TOTAL RUPEES .			TOTAL RUPEES .	...	68,206 11 0
					1,83,748 4 11

* Including R76-14-0, the amount of a cheque sent to, but not credited by the Bank and excluding R1,937-12-0, the amount of two cheques issued, but not cashed until after the end of the year.

Abstract Statement of the Endowments Accounts of University of Bombay for the year 1900-01.

Dr.

Cr.

Receipts.	Amount.	Disbursements.	Amount.
	<i>R a. p.</i>		<i>R a. p.</i>
To Cash Balance in the Bank of Bombay on 1st April 1900.	59,269 12 10	By Cash paid for Scholarships, Prizes, Medals, Fellowships, Lectureship, Commission, etc.	23,576 5 8
„ Interest on Government Promissory Notes, etc.	38,482 8 0	„ Cash Balance in the Bank of Bombay on 31st March 1901.	74,175 13 2
		„ Cash Balance in hand with the Registrar	0 2 0
TOTAL RUPEES .	97,752 4 10	TOTAL RUPEES .	97,752 4 10

NOTE.—The Reserve Funds consists of R2,90,000. This includes R25,000 invested in January 1902.

Annual Abstract Statement of Endowments Accounts for the year 1900-01.

No.	Names of Accounts.	Amount of Government Promissory Notes.	Balance on 1st April 1900.	Amount of Interest.	Total amount of Balance and Interest.	Amount of Scholarships, Prizes, Fellowships, Medals, Commission, etc.	Balance on 31st March 1901.
		<i>R</i>	<i>R a. p.</i>	<i>R a. p.</i>	<i>R a. p.</i>	<i>R a. p.</i>	<i>R a. p.</i>
1	Munguldass Nathoobhoy Travelling Fellowship.	20,000	284 4 5	700 0 0	984 4 5	702 6 0	281 14 5
2	Manockjee Limjee Gold Medal	8,300	1,453 15 1	290 8 0	1,744 7 1	1 8 0	1,742 15 1
3	Bhugwandass Purshottandas Sanskrit Scholarship.	14,500	2,001 7 10	507 8 0	2,508 15 10	502 0 0	2,006 15 10
	Carried forward .	...				...	...

Annual Abstract Statement of Endowments Accounts for the year 1900-01-- continued

No.	Names of Accounts.	Amount of Government Promissory Notes.	Balance on 1st April 1900.	Amount of Interest.	Total amount of Balance and Interest.	Amount of Scholarships, Prizes, Fellowships, Medals, Commission, etc.	Balance on 31st March 1900.
		<i>R</i>	<i>R</i> <i>a.</i> <i>p.</i>	<i>R</i> <i>a.</i> <i>p.</i>	<i>R</i> <i>a.</i> <i>p.</i>	<i>R</i> <i>a.</i> <i>p.</i>	<i>R</i> <i>a.</i> <i>p.</i>
	Brought forward	...	...	...	...	...	...
4	Homejee Cursatjee Dady Prize.	9,500	1,488 11 3	332 8 0	1,821 3 3	85 2 0	1,736 1 3
5	Joggonnath Sunkersett Sanskrit Scholarships.	20,000	288 14 7	738 8 0	1,027 6 7	662 4 0	365 2 7
6	Jam Shri Vibhaji Scholarship	1,100	217 2 2	189 0 0	406 2 2	181 4 0	224 14 2
7	Sir Cowasjee Jehaughier Latin Scholarship.	5,400	167 12 7	189 0 0	356 12 7	181 0 0	175 12 7
8	Kinloch Forbes Gold Medal	11,600	288 3 8	406 0 0	694 3 8	400 6 0	293 13 8
9	David Sassoon Hebrew Scholarship.	7,300	270 12 8	255 8 0	526 4 8	376 8 0	149 12 8
10	James Berkley Gold Medal and Prize.	10,800	179 13 4	378 0 0	557 13 4	523 4 0	34 9 4
11	Ellis Prize	1,500	262 11 6	52 8 0	315 3 6	50 8 0	264 11 6
12	Hebbert and LaTouche Scholarship.	5,000	424 11 11	175 0 0	599 11 11	84 8 0	515 3 11
13	Wilson Philological Lecture-ship.	24,000	935 12 5	840 0 0	1,775 12 5	1,682 10 0	93 2 5
14	Ellis Scholarship	7,500	158 10 3	262 8 0	421 2 3	210 12 0	210 6 3
15	Arnould Scholarship	6,000	165 10 3	210 0 0	375 10 3	204 10 0	171 0 3
16	Duke of Edinburgh Fellowship.	10,300	802 10 10	360 8 0	1,163 2 10	361 0 0	802 2 10
17	Bai Maneekbai Byremjee Jeejeebhoy Prize.	2,000	136 10 4	70 0 0	206 10 4	140 8 0	66 2 4
18	Rao Sir Pragnalji Scholarships.	31,500	825 10 0	1,102 8 0	1,928 2 0	1,004 12 0	923 6 0
19	Sir Javantsingji Scholarships	25,500	144 12 0	892 8 0	1,037 4 0	871 11 6	165 8 6
20	Karsandas Mulji Prize.	4,500	810 7 4	157 8 0	967 15 4	1 0 0	966 15 4
21	Dossabhyo Hormusjee Cama Prize.	7,500	1,370 1 0	262 8 0	1,632 9 0	106 8 0	1,526 1 0
22	Hughlings Prize	2,500	172 10 2	87 8 0	260 2 2	81 0 0	179 2 2
23	James Taylor Prize	2,600	*.....	91 0 0	91 0 0	94 2 8	*.....
24	Bhau Daji Prize	5,000	917 8 3	175 0 0	492 8 3	400 8 0	92 0 3
25	Venayekrao Juggannathjee Sunkersett Prize.	4,500	898 5 8	157 8 0	565 13 8	201 0 0	354 13 8
26	Merwanjee Framjee Panday Scholarship.	6,200	26 10 3	217 0 0	243 10 3	144 10 0	99 0 3
27	Kabandus Muncharam Scholarship.	6,000	340 9 0	210 0 0	550 9 0	200 10 0	349 15 0
28	Dhirajlal Mathuradas Scholarship.	6,000	218 4 0	210 0 0	428 4 0	200 10 0	227 10 0
29	Sinclair Prize	1,500	157 12 6	52 8 0	210 4 6	51 0 0	159 4 6
30	Gibbs Prize	2,100	30 11 3	73 8 0	104 3 3	106 0 0	+.....
31	Narayan Vasudev Scholarship	5,200	66 0 2	182 0 0	248 0 2	91 0 0	157 0 2
32	Sir George LeGrand Jacob Scholarship.	3,000	130 10 0	105 0 0	235 10 0	96 8 0	139 2 0
33	Sir George LeGrand Jacob Prize.	5,000	2,524 4 4	175 0 0	2,699 4 4	179 12 0	2,519 8 4
34	Jairazbhoy Peerbhoy Scholarship.	5,100	407 13 7	178 8 0	586 5 7	161 0 0	425 5 7
35	Varjivandas Madhavdas Sanskrit Scholarship.	5,400	407 11 8	189 0 0	596 11 8	182 0 0	414 11 8
36	Jamshedji Dorabji Naegamvala Prize.	3,000	9 7 0	105 0 0	114 7 0	0 8 0	113 15 0
37	Melvill Memorial Scholarship	6,000	88 1 1	210 0 0	298 1 1	171 0 0	122 1 1
38	Sir Frank Souther Scholarships	14,500	129 11 3	507 8 0	637 3 3	478 4 0	158 15 3
39	Charles Morehead Prize	5,100	218 9 7	178 8 0	397 1 7	151 0 0	246 1 7
40	Balkrishna Sudamji Prize	5,000	208 6 4	175 0 0	383 6 4	151 0 0	232 6 4
41	Bhagvatsinghji Collection of Sanskrit Manuscripts.	5,000	2,461 15 1	175 0 0	2,636 15 1	0 8 0	2,636 7 1
42	Majmudar Manishankar Kikani Sanskrit Scholarship.	3,100	167 3 3	108 8 0	275 11 3	97 0 0	178 11 3
43	Bhavnagar Percival Scholarship.	3,700	112 3 5	129 8 0	241 11 5	121 8 0	120 3 5
44	Bhau Saheb Desai Scholarships	7,300	231 2 11	255 8 0	476 10 11	181 8 0	295 2 11
45	Ashburner Prize	4,000	350 6 9	140 0 0	490 6 9	1 0 0	489 6 9
46	Kutchi Divan Bahadur Manibhai Prize.	2,500	163 0 0	87 8 0	250 8 0	80 8 0	170 0 0
47	James Greaves Scholarship	4,500	75 1 4	157 8 0	232 9 4	145 8 0	87 1 4
48	Colonel Patrick French Scholarship.	4,200	365 11 0	207 0 0	572 11 0	201 1 0	371 10 0
49	Divan Bahadur Lakshman Jagannath Vaidya Scholarship.	5,000	64 8 0	175 0 0	239 8 0	160 8 0	79 0 0
50	Vishvanath Narayan Mandlik Gold Medal.	7,300	1,163 10 0	255 8 0	1,419 2 0	1 14 0	1,417 4 0
51	The Scholarship of the Medical Women for India Fund of 1883.	3,000	744 3 0	150 0 0	894 3 0	150 8 0	743 11 0
52	Sir James Fergusson Scholarships.	23,400	1,350 4 6	819 0 0	2,169 4 6	783 2 0	1,386 2 6
	Carried forward	...	...	...	...	...	...

* Dr. Balance *R* *a.* *p.*
+ Ditto. *R* *a.* *p.*

No.	Names of Accounts.	Amount of Government Promissory Notes.	Balance on 1st April 1900.	Amount of Interest.	Total amount of Balance and Interest.	Amount of Scholarships, Prizes, Fellowships, Medals, Commission, etc.	Balance on 31st March 1901.
		<i>R</i>	<i>R a. p.</i>	<i>R a. p.</i>	<i>R a. p.</i>	<i>R a. p.</i>	<i>R a. p.</i>
	Brought forward	...	.....	.....	.....	.....	.....
53	Lady Reay Gold Medal and Medical Scholarship.	5,000	*.....	175 0 0	175 0 0	137 7 4	37 8 8
54	Jamshedji Nassarvanji Petit Zend Scholarship.	5,000	1,555 12 0	200 0 0	1,755 12 0	0 10 0	1,755 2 0
55	Divan Bahadur Manibhai Cutch Memorial Scholarship.	12,200	547 5 11	427 0 0	974 5 11	212 6 0	761 15 11
56	Sujna Gokulji Zala Vedant Prize.	15,000	2,253 2 9	525 0 0	2,778 2 9	796 4 0	1,981 14 9
57	Mohobat Fellowship	30,500	587 15 7	1,067 8 0	1,655 7 7	952 7 4	703 0 3
58	Judge Spencer Prize	5,100	193 12 0	178 8 0	372 4 0	151 8 0	220 12 0
59	Bai Shirinbai Rataushah Parakh Scholarship.	6,000	102 13 0	240 0 0	342 13 0	220 11 0	122 2 0
60	Vallabhdas Valji Scholarship	5,100	271 12 3	178 8 0	450 4 3	48 5 5	401 14 10
61	Pestaji Hormasji Cama Scholarship.	22,300	1,035 11 7	780 8 0	1,866 3 7	602 12 0	1,263 7 7
62	Bai Hirabai Pestaji Hormasji Cama Gold Medal.	5,000	447 3 0	175 0 0	622 3 0	183 8 0	438 11 0
63	R. M. Sayani Khoja Testimonial Scholarship.	5,200	216 3 9	182 0 0	398 3 9	181 4 0	216 15 9
64	Pandit Bhagvaual Indrajai Gold Medal and Prize.	6,000	1,446 0 8	300 0 0	1,746 0 8	21 12 0	1,724 4 8
65	Sir Dinsbah Manockji Petit Scholarship.	6,700	69 4 5	234 8 0	303 12 5	221 6 0	82 6 5
66	Maucherji Nowroji Banaji Scholarship.	5,200	195 10 10	182 0 0	377 10 10	138 8 0	239 2 10
67	Mrs. Satyavati Lallubhai Samaldas Scholarship.	4,800	348 6 6	168 0 0	516 6 6	168 14 5	347 8 1
68	Wordsworth Scholarship and Prize.	6,000	452 5 0	300 0 0	752 5 0	236 5 0	516 0 0
69	Kashinath Trimbak Telang Gold Medal.	6,000	894 11 10	210 0 0	1,104 11 10	210 0 0	894 11 10
70	Gibbs Library Fund	...	6,392 2 6	.....	6,392 2 6	.....	6,392 2 6
71	Gibbs Bust Fund	...	683 8 0	.....	683 8 0	.....	683 8 0
72	Wilson Bust Fund	...	4 5 0	.....	4 5 0	.....	4 5 0
73	University Rajabai Tower Clock and Chimes.	...	2,439 4 1	1,490 0 0	3,929 4 1	1,440 0 0	2,489 4 1
74	Fawcett Collection	1,500	940 10 8	52 8 0	993 2 8	1 0 0	992 2 8
75	Thomas Ormiston Memorial Fund (for the Garden).	...	641 3 0	.....	641 3 0	.....	641 3 0
76	Dosabbai Framji Cama Scholarship.	5,000	91 3 0	200 0 0	291 3 0	95 8 0	195 11 0
77	Gangabai Bhat Scholarship	5,000	147 8 0	165 0 0	312 8 0	167 0 0	145 8 0
78	Bai Aimai K. R. Cama Scholarship.	5,000	86 3 0	200 0 0	286 3 0	200 8 0	85 11 0
79	Pherozsha Merwanji Avesta and Pahlavi Scholarship.	5,000	196 8 0	200 0 0	396 8 0	200 10 0	195 14 0
80	Lord Sandhurst Scholarship	5,000	450 13 0	150 0 0	600 13 0	8 0 0	592 13 0
81	Bai Dayacore M. V. Sanskrit Scholarship.	5,000	346 9 0	175 0 0	521 9 0	175 8 0	346 1 0
82	Framji Sorabji Bhawnagri Scholarship.	6,000	195 10 0	210 0 0	405 10 0	210 10 0	195 0 0
83	Dr. Theodore Cooke Memorial Prize.	6,000	496 4 5	210 0 0	706 4 5	11 8 0	694 12 5
84	Uttamram Memorial Scholarship.	5,000	303 15 0	175 0 0	478 15 0	185 12 0	293 3 0
85	Narayan Mahadeb Parmanand Prize.	6,000	496 8 0	210 0 0	706 8 0	11 2 0	695 6 0
86	Sir Mangaldas Nathooobhoy Legal Scholarship.	20,000	1,890 10 2	1,035 0 0	2,925 10 2	1,034 14 0	1,890 12 2
87	Ibrahim Nurdin Scholarship	1,000	190 14 6	210 0 0	400 14 6	210 10 0	190 4 6
88	Chatfield Scholarship and Prize.	6,000	293 10 0	420 0 0	713 10 0	310 6 0	403 4 0
89	Rao Bahadur Karamsi Damji Scholarship	12,000	196 14 0	210 0 0	406 14 0	222 2 0	184 12 0
90	Sir Mangaldas Nathooobhoy Scholarships.	6,000	3,63,000	12,705 0 0	19,085 15 8	984 12 0	18,101 3 8
91	Miss Yamunabai Dalvi Scholarship.	6,000	.....	210 0 0	210 0 0	17 2 0	192 14 0
92	Abdulla Miralli Dharamsi Scholarship.	6,000	.....	210 0 0	210 0 0	23 8 0	186 8 0
93	J. C. Lisboa Gold Medal	6,000	.....	210 0 0	210 0 0	205 8 0	4 8 0
94	Dyramji Nusservanji Koyaji	6,000	.....	.....	.....	8 0 0	†.....
	Less Dr. Balance	10,43,500	59,299 10 10	38,482 8 0	97,782 2 10	23,606 3 8	74,186 14 7
		...	29 14 0	.....	29 14 0	29 14 0	10 15 5
		...	59,269 12 10	38,482 8 0	97,752 4 10	23,576 5 8	74,175 15 2

* Dr. Balance Rs28-11-4.
† Dr. Balance Rs6.

D. MACDONALD, M.D., B.Sc., C.M.,
University Registrar.

BOMBAY;
The 20th January 1902.

G. I. C. P. O. No. 1355 H. D.—14-2-1902.—50.—P. K. B.



सत्यमेव जयते

UNIVERSITY OF ALLAHABAD.

THE SENATE—

Number of Fellows named in the Act of Incorporation. *Ex-officio* Fellows, 12 ; deemed to have been elected and approved, or appointed, 32 (*vide* University Calendar, 1901-1902, pages 49 to 54).

Maximum number at any time since Incorporation. Maximum number at any time=111.

Present number Present number=111. (Two additional elections will take place at the next Annual Meeting of Senate, *viz.*, 3rd March 1902)—*vide* University Calendar, 1901-1902, pages 25 to 29.

Proportion of Europeans to Natives, officials to non-officials, residents to absentees. Proportion of Europeans to Natives=3 : 2, about. Government Officials, 67, Officers not under Government, 22 ; non-officials, 22.

Method of election By votes of Fellows (in person or by proxy) at each Annual Meeting of Senate—*vide* University Calendar, page 72.

Usual number of meetings per annum . . . Usually *two* meetings *per annum*, *viz.*, on first Monday in March (Calendar, page 55) and in November.

Usual attendance Average attendance at March meetings=44. Average attendance at November meetings=32.

If there are elected Fellows, state—

(a) when permission to elect was given . . . Permission to elect was given in the University Act of 1887—*vide* University Calendar, page 39, section 5(i) (c).

(b) number of elected Fellows now holding office. Of the present 43 elected Fellows, 14 hold office under the Government, 16 hold office not under the Government.

(c) constitution of electorate and method of election. The constitution of the electorate is that of the Senate itself, and the method of election is already given above—*vide* also University Calendar, pages 39 and 40.

(d) academic standing, degrees and qualifications of the elected. Of the 41 elected Fellows, there are 24 Europeans, of whom 23 hold Degrees of European Universities ; and 17 Natives, of whom 12 are graduates of an Indian University. The qualifications of the non-graduates are mostly those of a Barrister or Vakil.

THE SYNDICATE—

Total number ; and number of members engaged in teaching. Total number of members including the Vice-Chancellor=19 (*vide* University Calendar, pages 66, 67, 68). Of these, 12 are engaged in teaching.

Composition of the remainder The remainder is composed of the Vice-Chancellor ; Director of Public Instruction ; two Secretaries to Government, Public Works Department ; the University member of the Legislative Council and member of the Faculty of Law ; *one* other member of the Faculty of Law, and one Inspector of Schools, North-Western Provinces and Oudh.

Usual number of meetings per annum Seven meetings—(1) November, (2) December, (3) January, (4) February, (5) March, with adjourned meeting, (6) April, (7) July or August.

If there are non-resident members, state the distances at which they reside from the place of meeting. Principal, Benares College, 85 miles from Allahabad ; Principal, Roorkee College, 446 miles ; Principal, Lucknow Canning College, 165 miles ; Principal, Agra College, 278 miles ; Principal, Muhammedan Anglo-Oriental College, Aligarh, 312 miles ; Principal, Christ Church College, Cawnpore, 119 miles. In the case of the Inspector of Schools, and of the Secretaries to Government, Public Works Department, no fixed distances can be given.

THE FACULTIES—

Constitution. Is it necessary that each Fellow should belong to one of the Faculties ? The constitution of the Faculty of Arts is partly of *ex-officio* members (Principals of Colleges), 14 in number, and partly of elective members, 21 in number. In the Faculty of Science, there are 14 *ex-officio* members (Principals) and 6 elective. In the Faculty of Law, there are 13 members, all elective. It is not necessary that each Fellow should belong to one of the Faculties.

ALLAHABAD—*continued.*THE FACULTIES—*contd.*

Number of Fellows belonging to each Faculty.

Usual attendance at meetings of each Faculty The average attendance at each Faculty meeting is :—Arts 14 ; Science 8 ; Law 7.

GRADUATES—

Number of Graduates The Graduates of this University for each year from 1889 are given in the University Calendar, pages 684 and following. It is not known how many of these are living.

State whether a Register is kept, and whether a fee is paid on entering names. No further Register than that of the Calendar is kept. No fee is paid for entry of names.

Proportion of residents to non-residents Not known.

EXAMINERS—

Are Teachers who prepare for the examination excluded ? Not excluded.

Are members of the Syndicate excluded ? Not excluded.

Are Examiners always, or usually, Fellows or Graduates of the University for which they examine ? Examiners are not always Graduates of this University, but are nearly always Fellows of this University. The European Principals and Professors of Colleges, who are appointed Examiners, are Graduates of European Universities.

To what extent is an interchange of Examiners, or examination by outsiders, carried on ? In each subject for the B.A., M.A., B.Sc. and D. Sc. Examinations, an External Examiner, *i.e.*, a person not engaged in teaching in a College affiliated to the University of Allahabad is appointed—*vide* University Calendar, pages 88, 89.

To what extent are Moderators appointed to secure uniformity of standard ? There are ten Boards of Examiners—nine will be found enumerated in pages 87 and 88 of the University Calendar, and a tenth Board (Economics) has since been added. The chief duties of the Boards are the nominating Examiners for the Degrees Examinations, and the revising of *all* question papers. The duties are set forth in the University Calendar, pages 88—90.

Scale of remuneration for setting and marking papers. The scale of remuneration to Examiners will be found duly set forth in the University Calendar, pages 91 and 92, being for setting a paper and marking each answer-book in the M.A., or D.Sc. Examination, R100 and R2-8, respectively ; for the B.A. or B.Sc., R50 and R1-8, respectively ; for the Intermediate R25 and R1 and for the Entrance and School Final Examinations, R20 and 8 annas, respectively.

THE REGISTRAR—

Is he a whole-time officer, and, if not, what other duties does he perform ? The Registrar is a whole-time officer.

THE STAFF—

Number of persons employed in the Registrar's Office. The number of persons employed in the Registrar's Office is *six* besides himself, *viz.*, a Head and Second and Third Clerk, one Daftri and two Chaprasis.

Are they subject to Regulations in respect of pay, leave, and promotion ? None of these is subject to Regulations by which pay, leave or promotion may be counted on. The present Registrar has held office for ten years, without one day's leave of any kind.

EXAMINATIONS—

Give for each Degree Examination (from the Entrance upwards) of the last academic year the number of candidates, number who passed, and percentage of success and failure. The information here called for will be found in XVI—Comparative Table of Arts, Science and Law Examinations, facing page 800 of the University Calendar. The figures for the last academic year are—*Entrance*, 1,723 candidates, 607 passes or 35 per cent. successful ; *School-Final*, 452 candidates, 211 passes or 47 per cent. successful ; *Intermediate*, 650 candidates, 289 passes or 37 per cent. successful ; *B.A.*, 319 candidates, 175 passes or 56 per cent. successful ; *B. Sc.*, 5 candidates, 3 passes ; *Third D. Sc.*, one candidate, one pass ; *Second D. Sc.*, 3 candidates, 2 passes ; *First D. Sc.*, 6 candidates, 6 passes ; *M.A.*, 30 candidates, 21 passes.

FINANCE—

A summary statement, under headings, of the Receipts and Expenditure of the University, for the last academic year : Receipts and Expenditure of Trust Funds being separately shown. A statement, under headings, of University Receipts and Expenditure for the last academic year, together with separate statement of Receipts and Expenditure of Trust Funds, will be found in Appendix B, pages LX to LXIX of the University Minutes for the year 1900-1901, a copy of which is herewith sent.

ALLAHABAD ;

The February 1902. }

C. DODD,

Registrar, University of Allahabad.

UNIVERSITY OF THE PUNJAB.

THE SENATE—

(a) Number of Fellows named in Act of Incorporation—

By office	.	.	.	.	.	.	.	.	20
By name	.	.	.	.	.	.	.	.	105
TOTAL									125

(b) Maximum number at any time since Incorporation—

<i>Ex-officio</i>	.	.	.	.	.	.	.	.	33
By name	.	.	.	.	.	.	.	.	118
TOTAL									151

in the year 1887. (From this should be deducted the number of persons who were appointed by name, or elected, Fellows and at the same time were Fellows *ex-officio*. The information for past years is not available in the University office and can be obtained only after inquiries which might unduly delay the present reply.)

(c) Present number—

(i) <i>Ex-officio</i>	.	.	.	.	.	.	.	.	41
By name	.	.	.	.	.	.	.	.	105

of whom 10 are included under both heads, the total number being accordingly 136.

(ii) Europeans	.	.	.	.	.	.	.	.	64
Natives of India	.	.	.	.	.	.	.	.	72
(iii) Officials (including 41 who are Fellows by virtue of their office, 42, designated Fellows by name, who are now in Government Service and 12 who after retiring from Government Service are in receipt of pensions, and deducting those who are thus counted twice, as under) (c) (1)	.	.	.	.	.	.	.	.	85
Non-officials	.	.	.	.	.	.	.	.	51
(iv) Residents in Lahore	.	.	.	.	.	.	.	.	85
Non-residents	.	.	.	.	.	.	.	.	51

(Fellows who leave India without intention of returning thereby cease to be Fellows according to section 8 (2) of the Act of Incorporation.)

(d) By the Senate, in accordance with section 6, clause (c) of the Act of Incorporation. The procedure is specified in No. 19 of the Rules, given on page 43 of the Calendar for 1901-02.

(e) Average number of meetings per annum during the five years 1897—1901,4.

(f) Average attendance at the above meetings, 33. (It is to be noted however that Fellows unable to attend may record their votes in writing and submit them through the Registrar in accordance with Rules 7 and 8 on page 40 of the present year's Calendar.)

(g) Election of Fellows—

(a) Permission was given in the Act of Incorporation, section 6(c).

(b) Number of elected Fellows now holding office, 8.

(c) By the Senate in accordance with the procedure specified in No. 19 of the rules given on page 43 of the Calendar for 1901-02.

(d) The names, academic standing and qualifications of the 8 Fellows mentioned under (b) are as follows:—

(1) The Honourable Khalifa Syed Mohamed Husain, K.B., Mashir-ud-doula Mumtazul mulk, Judicial Member, Patiala State,

- (2) Muhammad Husain Khan, Khan Bahadur, retired Assistant Surgeon, now Honorary Extra Assistant Commissioner.
- (3) Shams-ul-Ulama Maulvi Muhammad Husain Azad, retired Assistant Professor of Persian and Arabic, Government College, Lahore.
- (4) Baboo Brij Lall Ghose, Rai Bahadur, Assistant Surgeon (Honorary Assistant Surgeon to the Viceroy), Lecturer on Surgery, Superintendent, Hindustani Class, etc., Medical College, Lahore.
- (5) Syed Muhammad Latif, Khan Bahadur, Shams-ul-Ulama, F.R.A.S., F.R.G.S., Extra Judicial Assistant Commissioner.
- (6) Shaikh Nanak Bakhsh, Khan Bahadur, Sub-Registrar and Honorary Extra Assistant Commissioner.
- (7) The Honourable Mr. Justice Protul Chandra Chatterjee, Rai Bahadur, M.A., B.L., Judge, Chief Court, Punjab.
- (8) Thomas Gordon Walker, Esq., C. S., Commissioner, Delhi.

THE SYNDICATE—

- (a) Total number 21, *viz.*, the Vice-Chancellor and

5	} representatives of the Faculty of	{	Oriental Learning.
5			Arts.
3			Law.
3			Medicine.
3			Science.
1			Engineering.

- (b) Number of the Syndics of the present year engaged in teaching, 12.
- (c) Of the others, the Vice-Chancellor is Financial Commissioner of the Punjab, one is Director of Public Instruction, two are Judges of the Chief Court, two are Barristers-at-Law, one is a Pleader of the Chief Court, and one is Sub-Registrar and Honorary Extra Assistant Commissioner. [The Syndic in Engineering, who was Executive Engineer of the Lahore (Provincial) Division, has resigned and his successor has not yet been elected.]
- (d) Average number of meetings per annum during the five years 1897—1901, 11.
- (e) There are, and have been, no non-resident members.

THE FACULTIES—

- (a) Constitution set forth in Rules 21 to 33, given on page 44 of the Calendar for 1901-02. Every Fellow is a member of one or more Faculties.

- (b) There are at present in the—

Oriental Faculty	. . . . .	82
In the Faculty of Arts	. . . . .	78
In the Faculty of Law	. . . . .	38
In the Faculty of Medicine	. . . . .	19
In the Science Faculty	. . . . .	29
In the Engineering Faculty	. . . . .	4

- (c) During the five years 1897—1901. The average attendance has been—

Oriental Faculty	. . . . .	11
Arts	. . . . .	10
Law	. . . . .	5
Medical	. . . . .	4
Science	. . . . .	5
Combined meetings of Arts and Oriental Faculties	. . . . .	10
Combined meetings of Arts and Oriental Science	. . . . .	6

GRADUATES—**(a) Number of graduates—**

Masters of Oriental Learning	.	.	.	.	12
Bachelors of Oriental Learning	.	.	.	.	55
Masters of Arts	.	.	.	.	117
Bachelors of Arts	.	.	.	.	1,176
Bachelors of Laws	.	.	.	.	139
Bachelors of Medicine	.	.	.	.	16

(b) The names are not entered in a special register.

(c) The present addresses of the graduates are not known.

EXAMINERS—

(a) Teachers who prepare for any examination are debarred from examining in the subject which they teach (See No. III of the Statutes on page 36 of the present year's Calendar), and, except in special cases, from examining in the examination concerned. Such special cases are the examinations in Latin, which is not regularly taught in any of the recognised Colleges, and Oral examinations.

(b) Members of the Syndicate are not necessarily excluded.

(c) and (d) The examiners appointed for those examinations for which recognised Colleges prepare, are largely persons engaged in teaching in other provinces.

(e) It is not considered practicable to appoint moderators because in the Arts, Science and Oriental Faculties with rare exceptions the persons who are qualified are engaged in teaching candidates for the examinations. In order however to secure uniformity of standard from year to year examiners are in general re-appointed for several years, model papers prepared by the Faculties are sent to them for their guidance and in case of departure from the usual standard the Boards of Studies may immediately after the examination consider what course to adopt, in accordance with Rule 33-C given on pages 47—48 of the Calendar for 1901-02.

(f) The scale of remuneration for setting and marking papers in the examinations of the several Faculties is given in the accompanying printed list (A).

THE REGISTRAR—

The Registrar is, in accordance with the rules given on pages 48 to 51 of the Calendar for 1901-02, Principal of the Oriental College, maintained by the University in accordance with No. IV (i) of the Statutes given on page 36 of the present year's Calendar.

THE STAFF—

(a) The number of persons employed in the Registrar's office is 13.

(b) They are subject to rules in respect of pay and leave, printed copies of which (B and C) are enclosed.

EXAMINATIONS—

A written Statement (D) is enclosed.

FINANCE—

A printed copy of the Report for the financial year ending on the 31st March 1901 (E) is enclosed.

A. W. STRATTON,
Registrar, Punjab University.



सत्यमेव जयते

A

RULES REGARDING THE APPOINTMENT, DUTIES AND REMUNERATION OF EXAMINERS.

1.—APPOINTMENT OF EXAMINERS.

The Examiners in all subjects, except in Law, shall be annually appointed by the Syndicate subject to the subsequent confirmation of the Senate not later than the month of May preceding the examination. Examiners in Oriental, Classical and Vernacular Languages selected for all Examinations in the Faculty of Arts shall be persons who have a good knowledge of English.

2. Examiners for all Oral and Practical Examinations shall be appointed by the Syndicate one month before the date of the examination.

3. In cases of emergency, owing to the refusal or inability of an Examiner to act, or other cause, when there is no time to bring the appointment of another Examiner before the Syndicate, the Vice-Chancellor, moved by the Registrar, shall be empowered to appoint such Examiner.

4. As a rule the Examiners for the Degree Examinations shall not be the same as those for the Intermediate Examination: provided that where the number of candidates for the Degree Examinations is small, one or both of the Examiners for these examinations may be employed for the Intermediate Examination.

5. When the number of candidates for the B. O. L. and M. O. L. Examinations is small, it is unnecessary to provide a second paper as specified below in paragraph 1 of the Duties of Examiners. The English papers shall be translated, and centographed, if necessary, on the spot; the University providing a Translator, who shall be present two hours previous to the examination and be subjected to proper supervision.

2.—DUTIES OF EXAMINERS.

1. In all subjects, except Languages, the Examiner shall be required to set two papers of equal standard, one for the examination of the Oriental Faculty, and the other for the examination of the Arts Faculty.* Except in cases where the Examiner who sets the paper is prepared to translate the paper for the examination in the Oriental Faculty and to examine each Vernacular answer himself, each paper set for the examination of the Oriental Faculty shall be handed over to a separate Examiner, who shall translate the paper and examine the answers.

2. (a) Examiners shall be required to distribute their questions with some uniformity over the whole range of the subjects in which they examine.

(b) In all examinations in Mathematics about two-thirds of the marks shall be assigned to book-work, or questions involving the direct application of ordinary rules.

(c) With regard to examinations in those subjects for which alternative text-books are recommended, Examiners are required not to base their questions exclusively on any one of such text-books.

(d) In the case of paper (a)—containing explanations of passages in Prose and Poetry and questions in Grammar—for the examinations in English by the Intermediate and B. A. Standard, about two-thirds of the marks shall be assigned to questions based on the text-books and one-third to those of a more general character.

(e) In the case of paper (a) for the examinations in the Oriental Languages by the Entrance, Intermediate and B. A. Standard,

* Where the number of candidates for the B. O. L. and M. O. L. Examinations is small, it is unnecessary to provide a second paper. (See above, paragraph 5 of appointment of Examiners.)

about two-thirds of the marks shall be assigned to questions containing passages for translation from the text-books (with explanation and grammar) and one-third passages of a similar standard from books not prescribed in the Course.

- (f) As a rule, alternative questions are to be avoided. If given, they shall always be of equivalent value and standard of difficulty.*
3. (a) The Examiner shall strictly conform to the rules laid down in the regulations for the examinations with which he is concerned, respecting the language to be used as the medium of examination in setting and answering the papers.
- (b) In the Intermediate, Entrance and Middle School Examinations, in the case of passages set for translation from the different Vernaculars into English, the Examiner is required to take care that the passages set in the Vernaculars shall be of an equal standard of difficulty. In case he is unable to set passages in any one of the five languages specified in the regulations, he shall inform the Registrar, who shall report his inability to the Syndicate, and special arrangements shall then be made to have the papers for translation from and into such Vernaculars set, looked over and marked by competent Examiners.
- (c) The Examiner in Natural Science is required to set a paper for the Oral and Practical test in that subject, and in cases where there are two Examiners, one of them shall be selected by the Syndicate for this purpose.
- (d) The Examiner in English is required to set a passage for the Oral Examination in English, and in cases where there are two Examiners, one of them shall be selected by the Syndicate for this purpose.
- (e) The Examiners in Classical Languages and Persian for the Arts Faculty must themselves translate the papers set by them for the Arts Faculty into Vernacular for the candidates on the Oriental side.
4. No Examiner shall give any fractional marks for any paper in the results sent to the Registrar.
5. Except in the M. A. Examination every Examiner shall assign marks for each question, which shall be indicated in the right hand margin of the paper.
6. Any paper which does not strictly conform to the rules herein laid down may be returned to the Examiners for correction by the Registrar.
7. Every Examiner shall forward his paper to the Registrar, under sealed cover, through the Registered post, and the Registrar is authorized to reject any paper which is not forwarded in the prescribed manner.

The following Rules relate to the re-examination of Answer Papers:—

1. In every examination, as soon as the results have been tabulated, the Registrar shall prepare a list of the candidates who, *having passed in the aggregate*, have failed by *not more than five* marks in one compulsory subject only, and, in order to guard against any undue severity or error in valuing the answers, their papers in the subject shall be re-examined by the original Examiners, or, in the case of the Middle School and Entrance Examinations, by the Head Examiners, who should be required to report with the least possible delay the *addition*, if any, made in the marks originally allotted.

The Examiner shall be paid for the papers re-examined at the usual rates.

* Model question papers are under preparation to serve as a guide for Examiners in setting papers, in order to ensure stability of standard, but they are not of course, intended to interfere otherwise with the discretion of Examiners.

2. Before publication of the results they shall be submitted to the Board of Studies with a statement of the percentage of passes in each subject, when the Board may order the re-examination of any set of papers by the original Examiners, or by the Head Examiners where such have been appointed.

3. In the Middle School and Entrance Examinations, whenever there is more than one Examiner in any paper, another Examiner, to be called the Head Examiner, shall be appointed for that subject. The Head Examiner shall set the question papers and shall re-examine not less than 5 per cent. of the answer papers looked over by each of the Examiners in his subject, with a view to see whether a uniform standard has been adopted. Where there appears to be a want of uniformity, he shall at once return the papers to the Examiner whose papers need revision, along with at least 5 papers examined and marked by himself, and with such instructions or suggestions as he deems necessary.

The papers shall be sent in the first instance to the Head Examiner in packets of 50.

4. In no case under paragraph 3 shall the Head Examiner himself increase or diminish the marks assigned to any paper by an Examiner.

In case of a difference arising between a Head Examiner and one of the subordinate Examiners, the matter shall be referred for decision to the Board of Studies.

5. The Head Examiner will be paid:—

(1) *For the Middle School Examination—*

- (a) For setting the papers, the usual fee.
- (b) For re-examining at least 5 per cent. of the papers submitted by Subordinate Examiners, in order to secure uniformity of standard, at the rate of annas 3 per paper of two hours, provided that the remuneration paid to a Head Examiner shall in no case be less than is paid to the Subordinate Examiner in the same paper.
- (c) For re-examining the papers of candidates under consideration, the fee specified in (b).
- (d) For other work connected with the Head Examinership, in English, General knowledge, Arithmetic, Mensuration and Urdu R150, in Persian and Science R100, in Algebra and Euclid R75.

(2) *For the Entrance Examination—*

- (a) For setting the papers, the usual fee.
- (b) For re-examining (at least 5 per cent.) of the papers submitted by Subordinate Examiners, in order to secure uniformity of standard, the same fee per paper as is paid to Subordinate Examiners.
- (c) For re-examining the papers of candidates under consideration, the same fee per paper as is paid to Subordinate Examiners.
- (d) For other work connected with the Head Examinership, in English, General knowledge, Mathematics and Persian R100, in Urdu and Science R75.

6. The Head Examiner shall be responsible that the whole results in his subject are submitted in due time; and shall certify that he has re-examined the required percentage of answer papers.

7. In the existing rules for the conduct of Boards of Studies, Sections 33(b) and (c), where there is a Head Examiner, by "Examiner" shall be understood "Head Examiner."

3.—REMUNERATION OF EXAMINERS.

Arts and Oriental Faculties.

1. The scale of remuneration to Examiners of written papers shall be as stated below :—

	For setting a paper.	For setting a second paper.*	For translating a paper.	For looking over a paper.
	R	R	R a. p.	R a. p.
Middle	15	...	7 8 0	0 1 6†
Entrance	20	10	10 0 0	{ 0 4 0 0 6 0‡
Intermediate	40	20	20 0 0	0 12 0
B. A. and B. O. L.	60	30	30 0 0	1 0 0
M. A. and M. O. L.	80	...	...	2 0 0
Shastri, Maulvi Fazil and Munshi Fazil.§	40	...	...	0 12 0
Visharada, Maulvi Aliam and Munshi Alim.§	30	...	...	0 8 0
Prajna, Maulvi and Munshi §	20	...	...	0 6 0

* The conditions under which such papers are set are defined above (vide Duties of Examiners).

† Except in the case of Sanitation papers, for which a fee of anna 1 for each paper is prescribed.

‡ A fee of annas 4 is allowed for looking over each Vernacular paper. In all other subjects a fee of annas 6 for each paper is allowed.

§ Provided that the total remuneration of any Examiner for any set of three papers shall not be less than R50.

2. The Oral Examination in English being only for reading, the Examiner in English shall set a paper for this without any further remuneration.

3. The fee for conducting the Oral Examination in English shall be annas 8 for each candidate, with a minimum fee of R15.

The following is the scale of remuneration for the Oral Examinations in Science :—

	For setting a paper.	For examining candidates.	Minimum fee.
	R a. p.	R a. p.	R a. p.
Entrance	15 0 0	0 8 0	15 0 0
Intermediate	40 0 0	1 0 0	15 0 0
B. A. and B. Sc.	60 0 0	2 0 0	15 0 0
M. A.	80 0 0	5 0 0	15 0 0

4. When the Examiner is unable to set and look over the passages for translation into English from all the Vernaculars specified in the regulations for the Middle School, Entrance and Intermediate Examinations, special arrangements may be made by the Syndicate for the remuneration of the persons selected to set, look over and mark the passages for translation from the Vernacular into English, and to look over and mark the passages set by the Examiners in English for translation into Vernaculars.

*Faculty of Law.**Licentiate in Law Examination.*

	R a. p.
For setting each Question Paper	100 0 0
For looking over each Answer Paper	2 0 0

Intermediate Examination.

	R a. p.
For setting each Question Paper	100 0 0
For looking over each Answer Paper	2 0 0

First Certificate Examination.

	<i>R</i>	<i>a.</i>	<i>p.</i>
For setting each Question Paper	75	0	0
For looking over each Answer Paper	1	0	0

Oral Examination.

For setting Question Paper and examining candidates	32	0	0
For an Assistant when required (for each day)	16	0	0

LL. B. Examination.

For setting a Question Paper	100	0	0
For examining each Answer Paper	2	8	0

LL. D. Examination.

For setting a Question Paper	100	0	0
For looking over each Answer Paper	5	0	0

Faculty of Medicine.

The Examiners in Medical Examinations shall be each paid a fee of R80 for setting a Question Paper, and R2 for examining and marking each Answer Paper.

The scale of fees for the practical and oral examinations in each subject shall be as under:—

	<i>R</i>	<i>a.</i>	<i>p.</i>
Medicine	5	0	0
Surgery and Ophthalmic Surgery			
Anatomy			
All others	2	0	0

provided that a minimum fee of R50 and a maximum fee of R150 shall be allowed to the Oral Examiner in each subject.

Faculty of Engineering.

Rupees 100 for setting the several Question Papers for the written portion of examination;

Rupees 3 for looking over and marking the Answer Papers of each candidate;

Rupees 2 for conducting the oral and practical examination of each candidate.

General.

1. If an Examiner is appointed to look over answers to a paper or papers that he has not himself set, the fee paid to him shall not be less than half the fee paid for setting the paper or papers.

2. If any Examiner fails to send in his marks within the limits of time prescribed for examination and re-examination, the amount of his remuneration shall be reduced by R8 for each day by which he exceeds that period.

3. When an Examiner is appointed to look over answers to a paper or papers that he set for the examination of a previous year, the fee paid to him should not be less than half the fee paid for setting the paper or papers.

B

List of the Clerical Staff of the University Office.

Number of Grade.	Name of Clerk.	Designation.	Value of Grade.	Rate of annual increment.
			<i>R</i>	<i>R</i>
1	M. Sikandar Khan . .	Head Clerk .	150 to 200	10
1st Grade . {	M. Muhammad Abdulla . .	Accountant .	60 to 90	6
	Mr. B. Ghosh, B.A., . .	Clerk . .	60 to 90	6
2nd Grade . {	M. Siraj-ud-din	"	40 to 60	4
	B. Bhagwan Sing	"	40 to 60	4
3rd Grade . {	M. Muhammad	"	30 to 40	2
	M. Rahmat Ullah	"	30 to 40	2
	M. Muhammad Bakhsh . .	"	30 to 40	2
4th Grade . {	Lala Kirpa Ram	"	20 to 30	2
	L. Bhagwan Das	"	20 to 30	2
	M. Maula Bakhsh	"	20 to 30	2
	Pt. Tribhawan Parshad . .	"	20 to 30	2
	L. Debagh Rai	Cashier . .	40 to 60	...

C

Rules regulating the grant of pensions and gratuities, leave and leave allowances, and acting allowances, to officers of the Panjab University.

These rules shall apply to all persons holding substantive appointments in the Panjab University, except the Registrar and the Assistant Registrar.

In these rules the terms "Superior" Servants, "Inferior" Servants, "Qualifying" Service, "Salary," "Pensions," "Gratuities," "Count," and similar technical terms are used in the same sense that they convey in the Civil Service Regulations.

(i) PENSIONS AND GRATUITIES.

(1) A pension fund to be called "The Panjab University Pension Fund" shall be established with effect from 1st April 1899, with the object of providing pensions to the employés of the University.

(2) A deduction of 5 per cent. shall be made each month from the gross salary of each superior servant and credited to the Pension Fund.

(3) A contribution of 7 per cent. on the gross salary in the case of each Superior Servant and of 5 per cent. in the case of each Inferior Servant shall be paid by the University and also credited to the Pension Fund.

(4) Pensions, or Gratuities, as the case may be, will be granted from the Fund, in accordance with the rules laid down in the Civil Service Regulations, for ordinary Uncovenanted Servants in the service of Government.

(5) Pension deductions and contributions shall not be made during leave other than privilege leave.

(6) Service Books shall be maintained in accordance with the rules prescribed in Chapter XXXIX, Section II of the Civil Service Regulations, for all servants; and the procedure laid down in Chapters XLIII and XLIV of those Regulations for the sanction and payment of pensions shall be followed as far as practicable.

(7) These rules shall come into force from 1st April 1899, from which date service in the Punjab University will qualify for pension, except in the undermentioned cases:—

(a) In the case of Inferior Servants service from the date of employment under the University shall count;

(b) in the case of Superior Servants service for any period prior to 1st April 1899 may count if such servants pay (within fifteen months) arrear subscriptions for that period at the rate of 5 per cent. on gross salary with compound interest at $3\frac{1}{2}$ per cent. per annum calculated at the end of each half year.

(8) If any Superior Servant pays arrear subscriptions under rule 7 (b) the University shall simultaneously transfer to the credit of the Pension Fund an amount equal to $\frac{7}{8}$ ths of the amount paid by the subscriber.

(9) No Superior Servant shall have any claim to the deductions made from his salary apart from his eligibility for a pension in accordance with the terms of the rules.

(ii) LEAVE, LEAVE ALLOWANCES AND ACTING ALLOWANCES.

(10) Leave, leave allowances and acting allowances will be regulated according to the rules in the Civil Service Regulations applicable to Uncommissioned Government Servants.

D

Statement showing the number of candidates went up, passed and failed with percentages of passes and failures at the several examinations of the Oriental, Arts, Science, Medical and Law Faculties for 1901.

EXAMINATIONS.		Number went up.	Number passed.	Number failed.	Per- centage of passes.	Per- centage of failure
ORIENTAL FACULTY EXAMINATIONS.						
1	Entrance	10	8	2	80	20
2	Intermediate	5	4	1	80	20
3	Bachelor of Oriental Learning	6	4	2	66.6	33.3
4	Master of Oriental Learning	1	...	1	...	100
ARTS FACULTY EXAMINATIONS.						
1	Entrance	2,748	1,398	1,350	50.9	49.5
2	Intermediate	575	246	329	42.8	57.2
3	Bachelor of Arts	376	127	249	33.8	66.2
4	Master of Arts	24	10	14	41.7	58.3
SCIENCE FACULTY EXAMINATIONS.						
1	Entrance	37	20	17	54.05	45.9
2	Intermediate	19	9	10	47.3	52.6
MEDICAL FACULTY EXAMINATIONS.						
1	Preliminary for M. B.	1	1	...	100	...
2	First M. B.	2	2	...	100	...
3	Second M. B.	8	5	3	62.5	37.5
LAW FACULTY EXAMINATIONS.						
1	Preliminary Examination in Law	62	53	9	85.4	14.5
2	Intermediate Examination in Law	31	22	9	70.9	29.3
3	Bachelor of Law	66	22	44	33.3	66.6

Abstract of Current Account of the

INCOME.		Revised Budget Estimates.	Actuals.
		R	R a. p.
Balance on 1st April 1900, as per Cash Book . . . . .		...	1,36,423 10 7
Subscriptions		3,000	3,000 0 0
Interest		9,411	9,062 8 0
Fees		1,27,608	1,27,715 4 0
Government Grants-in-aid	General	21,500	21,500 0 0
	For conduct of Middle School Examination	2,000	2,000 0 0
	For Salary of Government Assistant Professors taken over at Rs230 per mensem.	2,760	2,760 0 0
	For Oriental College and School	3,120	3,120 0 0
Miscellaneous, viz. —			
Amount realized by sale of Books, Calendars, etc.		1,072	1,294 3 0
Savings from Scholarships, etc.		85	85 5 0
Miscellaneous		340	461 3 0
Deposits, Repayable		230	583 14 7
GRAND TOTAL		1,71,176	3,08,006 0 2



REGISTRAR'S OFFICE,
LAHORE.
The 13th July 1901.

Punjab University for 1900-1901.

Budget Heads.	EXPENDITURE.	Budget Grants as per Revised Estimate.	Actuals.		
		R	R	a.	p.
	A.—ORIENTAL COLLEGE ALLOTMENT—	16,500	16,000	0	0
	Special Grant for Oriental College and School	3,120	3,120	0	0
	Government Grant for Assistant Professors	2,760	2,760	0	0
	B.—EXPENDITURE UNDER THE CONTROL OF THE UNIVERSITY—				
I	INSTRUCTION—				
	1.— <i>Oriental</i> —				
	Title Branch Scholarships	2,135	2,115	13	4
	2.— <i>Oriental and Arts</i> —				
	College Scholarships	3,480	3,486	15	9
	3.— <i>Law</i> —				
	Lecturing Staff and Contingencies	13,190	12,905	2	11
	4.— <i>Medicine</i> —				
	(a) Scholarships tenable at the Medical College, Lahore . . . . .	...	...
	(b) Yunani and Vaidik Lecturers ditto ditto	540	540	0	0
	5.— <i>Engineering</i> —				
	(a) Scholarships	288	288	0	0
	(b) Contingencies for Engineering Class in Mayo School of Art.	293	293	0	0
II	ENCOURAGEMENT TO LITERATURE—				
	(a) Rewards to Authors, Compilers and Translators . . . . .	...	...
III	UNIVERSITY LIBRARIES—				
	(a) Additions to General Library	500	818	2	9
	(b) Ditto Law ditto	200			
	(c) Preparation of General Library Catalogue . . . . .	...		
	(d) Supervision of University Libraries	120			
IV	EXAMINATIONS—				
	(a) Remuneration to Examiners, etc.	54,635	54,519	5	6
	(b) Cost of conducting Examinations	27,405	28,551	8	5
V	UNIVERSITY ESTABLISHMENT AND MISCELLANEOUS EXPENSES—				
	1.—(a) Registrar and Assistant Registrar	7,194	7,122	9	1
	(b) Registrar's Office Establishment	8,000	7,904	4	7
	(c) Transfer to Pension Fund	560	555	6	11
	(d) Printing Charges	7,000	6,989	10	9
	(e) Contingencies	3,500	3,488	13	5
	(f) Auditors of Accounts	350	350	0	0
	(g) Athletic Sports Tournament	1,000	1,000	0	0
	(h) Printing of approved books	65	64	13	0
	2.—Convocation Expenses	732	730	7	6
	3.—Stock of Gowns . . . . .	...	...
	4.—Medical Assistance	225	209	2	11
VI	BUILDINGS AND FURNITURE—				
	(a) Senate Hall Petty Establishment	520	515	15	1
	(b) Repairs and Furniture	500	305	0	3
	(c) Provision for Tables and Stools for Examination purposes.	1,000	745	11	0
	(d) Part payment for rent of Law School Building and pay of Chaudidar.	264	264	0	0
VII	1.—Deposits repaid	200	223	4	10
	2.—Contribution for meeting deficiency of certain Trusts	271	270	13	1
	3.—Gratuities to Establishment . . . . .	...	100	0	0
	4.—Refund of fees and price of books	400	397	13	0
	6.—Purchase of Government Promissory Notes for Rs10,000 excess cost over the nominal value. . . . .	...	—194	1	7
	Total	1,56,847	1,54,435	12	6
	Balance on 31st March 1901—				
	Floating Account	83,070			8
	Government Promissory Notes	70,000			0
	In hands of Registrar	500			0
	GRAND TOTAL	...	1,53,570	3	8
		...	3,03,006	0	2

RAMJI DAS,
Auditor.

A. W. STRATTON,
Registrar.

Abstract of Special Endowed Trusts Account of the Punjab University for 1900-1901.

INCOME.	Budget Estimates.	Government Securities.	Cash.	TOTAL.	EXPENDITURE.	Budget grant.	Government Securities.	Cash.	TOTAL.
	R a.	R	R a. p.	R a. p.		R a.	R	R a. p.	R a. p.
Balance on 1st April 1900, as per Cash Book.	...	2,96,600	4,937 9 0	3,10,537 9 0	Endowed Readerships and Translatorship.	5,398 9	...	5,195 10 2	5,195 10 2
Interest on Government Securities.	10,353 0	...	10,137 8 0	10,370 8 0	Endowed Scholarships (Arts Faculty).	3,547 8	...	3,478 8 8	3,478 8 8
Sale proceeds of copies of Urdu translation of Rajgan-i-Punjab.	...	...	42 0 0	42 0 0	Cost of Medals.	880 0	...	903 11 0	903 11 0
Sale proceeds of copies of Urdu translation of Ransa-i-Punjab.	...	...	...	...	Special Prizes.	185 0	...	157 0 0	157 0 0
Contributions from Current Account to meet deficiency of certain Trusts.	482 13	...	270 13 1	270 13 1	Endowed Scholarships (Oriental Faculty).	588 0	...	539 13 4	539 13 4
Savings.	...	...	47 13 10	47 13 1	Total.	10,599 1	...	10,274 11 2	10,274 11 2
Donation.	167 15	...	177 4 0	177 4 0	Balance on 31st March 1901.	...	2,97,100	5,571 4 9	3,02,671 4 9
Purchase of Government Promissory Notes.	...	500	...	500 0 0	GRAND TOTAL.	10,599 1	2,97,100	15,845 15 11	3,12,945 15 11
GRAND TOTAL.	11,003 12	2,97,100	15,845 15 11	3,12,945 15 11					

Abstract of the General Endowment Account of the Punjab University for 1900-1901.

INCOME.	Budget Estimates.	Government Securities.	Cash.	Total.	EXPENDITURE.	Budget Estimates.	Government Securities.	Cash.	Total.
	R	R	R	R		R	R	R	R
Balance on 1st April 1900, as per Cash Book.	...	1,89,600	...	1,89,600	Interest transferred to Current Account.	6,619	...	6,619	6,619
Interest.	6,619	...	6,619	6,619	Total.	...	...	6,619	6,619
					Balance on 31st March 1901.	...	1,89,600	...	1,89,600
GRAND TOTAL.	...	1,89,600	6,619	1,96,219	GRAND TOTAL.	...	1,89,600	6,619	1,96,219

Abstract of the Unendowed Special Subscriptions and Donations Account of the Punjab University for 1900-1901.

INCOME.	Budget Estimates.	Actuals.	EXPENDITURE.	Budget Grants.	Actuals.
	R	R a. p.		R	R a. p.
Balance on 1st April 1900, as per Cash Book.	...	1,309 12 7	Nabha Gurmukhi Scholarships.	192	101 11 1
Subscriptions from—			Sir William Rattigan's Sanskrit Scholarship.	...	...
Nabha State for Gurmukhi Scholarships.	200	200 0 0	Raja Harbans Singh-Aitchison and Leitner Medals.	200	100 0 0
Accountant General, Punjab, for McLeod Purse.	...	100 0 0	McLeod Purse.	...	100 0 0
Sir William Rattigan for Sanskrit Scholarship.	...	...	R. B. Babu P. C. Chatterjee's Prize.	50	...
R. B. Babu P. C. Chatterjee's Sanskrit Prize.	50	...	Total.	442	301 11 1
			Balance on 31st March 1901.	...	1,309 1 8
GRAND TOTAL.	250	1,609 12 7	GRAND TOTAL.	442	1,609 12 7

REGISTRAR'S OFFICE,
LAHORE;
The 13th July 1901.

RAMJI DAS,
Auditor.

A. W. STRATTON,
Registrar.

Abstract of Oriental College Account for 1900-1901.

INCOME.	Budget Estimates.	Actuals.	EXPENDITURE.	Budget Grants.	Actuals.
	<i>R a p.</i>	<i>R a p.</i>		<i>R</i>	<i>R a p.</i>
Balance on 1st April 1900, as per Cash Book.	...	816 6 3	Superintendence	4,944	4,909 14 11
Allotment from University	16,509 14 0	16,000 0 0	College Staff	5,916	5,855 6 4
Special Government Grant for Oriental College and School.	3,120 0 0	3,120 0 0	School Staff	4,044	4,030 0 0
Special Government Grant for Assistant Professors.	2,760 0 0	2,760 0 0	Laboratory Assistant and Chemicals	132	130 2 0
College fees	500 0 0	{ 220 11 0 195 0 0 253 8 11	Petty Establishment	800	805 0 0
Boarding house-fees			Boarding-house Establishment, Rent and Medical assistance.	1,146	1,080 12 10
Miscellaneous			Office Establishment	708	711 0 0
			Contingencies and Punkha Coolies	616	512 9 8
			Furniture	120	51 14 0
			Allowance to Teachers instructing classical languages to Government College classes.	2,400	2,384 13 2
			Stipends—		
			Title branch	1,668	1,383 8 0
			Degree branch	336	262 1 4
			Oriental College Library	500	499 8 5
			Printing charges	60	61 7 0
			Miscellaneous . . . . .	..	203 4 5
			Total	22,790	22,381 0 3
			Balance on 31st March 1901 . . . . .	...	984 9 11
GRAND TOTAL	22,889 14 0	23,365 10 2	GRAND TOTAL . . . . .	...	23,365 10 2

REGISTRAR'S OFFICE,
LAHORE;
The 13th July 1901.

RAMJI DAS,
Auditor.

A. W. STRATTON,
Registrar.



*Consolidated Balance-Sheet of the Punjab University Current, Special Endowed Trusts,
College Accounts for*

DR.	Government Securities.	Cash.	Total Amount.	GRAND TOTAL.
	R	R a. p.	R a. p.	R a. p.
To Current Account	70,000	83,570 8 8	1,53,570 8 9	
To Oriental College Account . . . . .	...	984 9 11	984 9 11	
To General Endowment Account	1,89,600	...	1,89,600 0 0	
To Special Endowed Trusts Account, viz.—				
(1) Alfred-Patiala Translatorship	20,900	186 8 11		
(2) Alexandra Readership	11,950	...		
(3) McLeod-Kashmir Sanskrit Readership	31,600	31 9 8		
(4) McLeod-Kapurthala N. S. Readership	25,200	...		
(5) Mayo-Patiala Engineering Readership	14,500	7 1 0		
(6) McLeod-Panjab Arabic Readership	25,100	...		
(7) Alfred Nabha-Jind Scholarship	10,700	411 0 2		
(8) Bahawalpur Arabic Scholarship	10,700	803 3 7		
(9) Amritsar McLeod Memorial Scholarship	4,200	720 5 4		
(10) Fuller Exhibition Scholarship	10,550	236 8 0		
(11) Jind-Panjabi Scholarships	5,200	418 3 9		
(12) Patiala Gurmukhi Teaching and Scholarship	14,400	191 10 7		
(13) Brandreth Leitner Prize	500	68 8 0		
(14) Jaishi Ram Medals	2,000	18 2 3		
(15) MacLagan Gold Medal	2,000	118 5 8		
(16) Inayat Ali-Watson Silver Medal	950	58 7 4		
(17) Inayat Ali-Griffin Prize	1,850	281 0 11		
(18) Alwar Gold Medal	2,500	209 13 8		
(19) Rai Kanhaya Lal-Pollard Prize	1,000	118 12 9		
(20) Khalifa Muhammad Hussain-Aitchison Medal	3,100	126 7 8		
(21) Khalifa Muhammad Hassan Jubilee Medal	3,500	498 1 7		
(22) Aitchison-Ram Rattan Sanskrit Scholarships	27,500	799 4 11		
(23) Wakefield Memorial Scholarship	1,000	64 14 8		
(24) Cooper Medal	500	10 1 11		
(25) Patiala-Sime Medal	3,000	42 8 1		
(26) F. S. Jamal-ud-din Prize	1,000	3 7 7		
(27) Prince Albert Victor-Patiala Scholarships	55,100	504 6 8		
(28) L. Bhagwan Das's Gift	700	298 5 8		
(29) Shrimati Dhan Devi and Shrimati Jai Kaur Medal	1,000	15 3 0		
(30) Rai Sahib Munshi Gulab Singh-Denzil Ibbetson Diamond Jubilee Purse	2,900	3 10 10		
(31) K. R. Sh. Nanak Bakhsh Medal	1,000	13 18 0		
(32) Sahibzada Muhammad Obaidulla Khan Medals	1,000	...		
(33) Malick Das Ram Medal	500	11 4 0		
	2,97,100	5,765 14 0	3,02,865 14 0	
To Unendowed Special Subscriptions and Donations Account—				
(1) Nabha-Gurmukhi Scholarships . . . . .	...	1,057 2 0		
(2) Sir William Rattigan's Sanskrit Scholarship . . . . .	...	0 15 2		
(3) Raja Harbans Singh-Aitchison and Leitner Medals . . . . .	...	200 0 0		
(4) Rai Bahadur Babu P. C. Chatterjee's Sanskrit Prize . . . . .	...	50 0 0	1,308 1 6	
To Pension Fund Account	6,000	545 3 0		
GRAND TOTAL . . . . .	...	...	6,545 3 0	6,54,874 0 1

REGISTRAR'S OFFICE.

LAHORE:

The 13th July 19

General Endowment, Unendowed Special Subscriptions and Donations and Oriental the year 1900-1901.

Cr.	Government Securities.	Cash.	Total Amount.	Grand Total.
	<i>R</i>	<i>R a. p.</i>	<i>R a. p.</i>	<i>R a. p.</i>
Current Account (1) By Bank of Bengal, Lahore .	70,000	83,070 3 8	1,53,070 3 8	
Ditto (2) By Registrar . . . . .	...	500 0 0	500 0 0	
Oriental College Account (1) By Bank of Bengal, Lahore.	...	964 9 11	964 9 11	
Ditto (2) By Principal, Oriental College.	...	20 0 0	20 0 0	
General Endowment Account—By Bank of Bengal, Lahore.	1,89,600	...	1,89,600 0 0	
Special Endowed } (1) By Bank of Bengal, Lahore	2,97,100	5,571 4 9	3,02,671 4 9	
Trusts Account } Ditto (2) By Kapurthala N. S. Readership.	...	23 12 3	23 12 3	
Ditto (3) By McLeod-Panjab Arabic Readership.	...	105 8 3	105 8 3	
Ditto (4) Sahibzada Muhammad Obed-ulla Khan Medal.	...	65 4 9	65 4 9	
Unendowed Special Subscriptions and Donations—By Bank of Bengal, Lahore.	...	1,308 1 6	1,308 1 6	
Pension Fund Account—By Bank of Bengal, Lahore .	6,000	545 3 0	6,545 3 0	
GRAND TOTAL .	...	...	...	6,54,874 0 1

RAMJI DAS,
Auditor.

A. W. STRATTON,
Registrar.

Abstract of Pension Fund Account for 1900-1901.

INCOME.	Government Securities.	Cash.	EXPENDITURE.	Government Securities.	Cash.
	<i>R</i>	<i>R a. p.</i>		<i>R</i>	<i>R a. p.</i>
Balance from last year	4,000	186 11 6	Cost of Government Promissory Notes purchased.	...	1,956 15 1
Contribution received from employes . . . . .	...	1,132 8 3			
Contributed by the University . . . . .	...	1,050 2 4			
Interest on Government Promissory Notes	2,000	182 12 0			
Government Promissory Notes purchased during the year.	...	...	
			Total .	...	1,956 15 0
			Balance .	6,000	545 3 0
Total .	6,000	2,502 2 1	GRAND TOTAL .	6,000	2,502 2 1

REGISTRAR'S OFFICE,
LAHORE;
The 13th July 1901. }

RAMJI DAS,
Auditor.

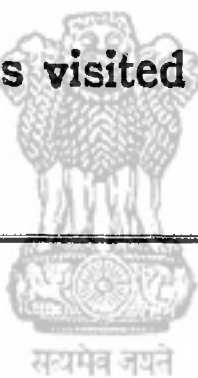
A. W. STRATTON,
Registrar.



INDIAN UNIVERSITIES COMMISSION.

1902.

Notes on Institutions visited by the Commission





सत्यमेव जयते

TABLE OF CONTENTS.

				Date of visit.	Page.
MADRAS.					
1. Madras Christian College	...	...	...	19th February	1
2. Presidency College	...	...	...	21st "	ib
3. Law College, Madras	...	...	...	24th "	2
4. Medical College and Hospital	...	...	...	24th "	ib
5. Pachaiyappa's College	...	...	...	24th "	3
6. Teachers' College, Saidapet	...	...	...	25th "	ib
7. College of Agriculture, Saidapet	...	...	...	25th "	4
BANGALORE.					
1. Central College	...	...	...	23rd February	4
POONA.					
1. College of Science	...	...	...	27th February	4
2. Fergusson College	...	...	...	27th "	5
3. Deccan College	...	...	...	27th "	ib
BOMBAY.					
1. Elphinstone College	...	...	...	3rd March	6
2. Wilson College	...	...	...	4th "	7
3. Grant Medical College	...	...	...	5th "	ib
4. St. Xavier's College	...	...	...	6th "	8
5. Anjuman-i-Islam High School	...	...	...	6th "	9
AHMEDABAD.					
1. Gujarat College	...	...	...	9th March	10
NAGPUR.					
1. Hislop College	...	...	...	10th March	10
2. Morris College	...	...	...	10th "	ib
JUBBULPORE.					
1. Government College	...	...	...	10th March	11
2. Training College	...	...	...	10th "	12
PATNA.					
1. Government College	...	...	...	11th March	12
2. Behar School of Engineering	...	...	...	11th "	13
3. Behar National College	...	...	...	11th "	ib
CALCUTTA.					
1. Presidency College	...	...	...	13th March	14
2. Utterpara College and School	...	...	...	15th "	15
3. Ripon College and School	...	...	...	17th "	ib
4. General Assembly's Institution and School	...	...	...	18th "	16
5. Albert College	...	...	...	19th "	17
6. City College	...	...	...	19th "	ib
7. Medical College	...	...	...	20th "	18
8. St. Xavier's College	...	...	...	21st "	ib
9. Sibpur Civil Engineering College	...	...	...	22nd "	19
10. Bangabasi College	...	...	...	26th "	20
11. Calcutta Academy	...	...	...	26th "	ib
12. Metropolitan Institution	...	...	...	26th "	21
13. Indian Science Association	...	...	...	26th "	ib
KURSEONG.					
1. Training College	...	...	...	28th March	22

					Date of visit.	Page.
BENARES.						
1. Queen's College	...	...	...	...	2nd April	23
2. Central Hindu College	...	...	...	...	3rd „	ib
ALLAHABAD.						
1. Muir Central College	...	...	...	...	4th April	24
2. Kayastha Pathshala	...	...	...	...	7th „	ib
3. Central Training College	...	...	...	...	8th „	25
LUCKNOW.						
1. Reid Christian College	...	...	...	...	10th April	25
2. Isabella Thoburn College	...	...	...	...	11th „	ib
3. Canning College	...	...	...	...	11th „	26
AGRA.						
1. Agra College	...	...	...	...	10th April	26
2. St. Peter's College	...	...	...	...	10th „	27
3. St. John's College	...	...	...	...	10th „	ib
ALIGARH.						
1. Muhammadan Anglo Oriental College	...	...	...	...	11th April	28
LAHORE.						
1. Government College	...	...	...	...	14th April	29
2. Oriental College	...	...	...	...	14th „	30
3. Medical College	...	...	...	...	15th „	ib
4. Central Training College	...	...	...	...	16th „	31
5. Dayanand Anglo-Vedic College	...	...	...	...	16th „	ib
6. Islamia College	...	...	...	...	17th „	32
7. Forman Christian College	...	...	...	...	17th „	33
8. Law School	...	...	...	...	18th „	ib



सत्यमेव जयते

MADRAS.

1. MADRAS CHRISTIAN COLLEGE.

All the Members of the Universities Commission paid a visit of inspection to the Christian College, Madras, on the 19th February 1902. The building is in the town itself and has attached to it two hostels. The main building accommodates all the College classes as well as those of the attached Collegiate school and is perhaps a little overcrowded. The class rooms are numerous but the general arrangement of the rooms and of the connecting passages seems confused. Many of the class rooms and the library, etc., are good rooms, but others on the other hand, are very unsuitable for class or lecture rooms.

Generally speaking the College is well supplied with teaching appliances, and the staff seems sufficiently strong and numerous. There is a large Chemical Laboratory, but it is rather inadequately furnished and the arrangements are old, and in some respects rather primitive. Fairly good practical work for students could however be carried on in it.

It did not appear that the Physical Science side of the work had been as well developed as that of Chemistry; and the rooms are poor and ill lighted and the supply of apparatus small.

The Library, Reading Room and Refreshment Room for students are well arranged and likely to be very useful.

The two hostels will accommodate a large number of students, and the hostels are also provided with common rooms and small libraries, rooms for holding meetings of debating societies, etc. A large amount of money has already been spent on hostels. The rooms, passages, etc., of the hostels were again not very well arranged and might even be called inconvenient. The students appeared to keep their rooms clean and tidy; and there seemed to be very good feeling between the students and professors, etc.

It appeared to me individually that the discipline of the students was rather lax, as there was much crowding in the corridors, etc., when the Commission was making its inspection.

A. PEDLER.

The 19th March 1902.

2. PRESIDENCY COLLEGE.

All the Members of the Universities Commission visited the Madras Presidency College, on the 21st February 1902.

The College is a very handsome and well equipped building and well suited for the purposes of a College.

The class rooms are excellent, being well arranged, well furnished, well lighted and well ventilated.

The library is a large one and kept in a well arranged hall. The books are also well kept and in every way the library is as good as can be desired. The arrangements for the Physical Science work seem particularly good, though they are not yet quite complete. The space allotted to Physical Science is generous, and the supply of apparatus seems ample.

In the case of the Chemical Section, part of it is old fashioned, but another part is modern and quite up to date. The space allotted and the supply of apparatus are both as large as can be necessary for some time to come. The Chemical Section has been dealt with generously. In the Biological Section the arrangements and appliances seem as good as could be desired, even in a provincial college in England or in any part of Europe. Excellent work should be done here.

In the smaller science sections the arrangements seem sufficient for the purposes desired.

The Hostel attached to the College is at some little distance from the main building. It is under the resident superintendence of one of the Professors of the Education Department. It is large, very well designed and arranged, and was in most excellent order.

A. PEDLER.

The 19th March 1902.

3. LAW COLLEGE, MADRAS.

We (the President and I) visited the Madras Law College at about noon on the 24th February 1902.

The college is located in a commodious building, and it has a good library, though one would wish there were more books on Hindu and Mahomedan Law than we found.

It is a whole-time college, but no lectures were going on when we visited it. We found a few students engaged in private study.

It has a large number of students, and the professorial staff is full and efficient.

The college is under the management of a Council composed chiefly of Judges of the High Court and members of the Professorial Staff.

GOOROO DASS BANERJEE.

May 6th, 1902.

4. MEDICAL COLLEGE AND HOSPITAL.

Visited by Mr. Hewett and Mr. Pedler on the 24th February 1902.

An old building fairly well equipped, but by no means modern. The Museum appeared to me to be poor and not well looked after.

The arrangements for teaching students practically appear to have been receiving attention of late. There is a large Chemical Laboratory for the practical work of the students, capable probably of holding 70 or 80 students. Gas fittings, etc., have been provided, and there is gas in the building, but none is actually used in the Chemical Laboratory by the students, though apparently used by the Professors. The working benches are poor and badly arranged, and the supply of apparatus is also poor.

Some new Laboratories have recently been erected for other practical work, partly chemical, partly biological, bacteriological, etc. It is clear that the gentleman who designed the fittings had little knowledge of practical work or of the requirements of students. In the case of the chemical balances in the new buildings the glass cases had been pasted over with brown paper—a clear proof of their not being understood. It is impossible that they can be used practically, or for accurate weighings.

I saw practically no signs of any original work going on by the Professors except perhaps in the Bacteriological section.

The Hospital seemed good, airy and clean, but the operating rooms, etc., did not show that modern ideas have been utilized very largely.

We were shown no hostels for the students.

A. PEDLER.

The 18th March 1902.

5. PACHAIYAPPA'S COLLEGE.

On Monday, the 24th February, in company with the Honourable Syed Hossain Bilgrami, I visited the Pachaiyappa's College. This is a purely native institution managed by a body of Hindu Trustees and dedicated solely to the education of the Hindu community, particularly of Madras.

The College is attached to a large High School out of which it originally grew and is carried on in the same building with the High School. Our observations, however, were confined to the College. We found four college classes at work representing a total roll of a little below 150 students. The B.A. classes were divided into the History and the Philosophy sections, these being the two subjects in which the College is affiliated to the Madras University for the purposes of the B.A. degree.

This College appeared to have a sufficient staff, including three European professors, and to contain a considerable number of promising students. The accommodation provided for the College classes appeared to us to be rather inadequate, some of the class rooms enjoying very little protection from the sun and being otherwise much less comfortable than they ought to be. The Professors' room was quite unfit for its purpose and it was evident that the Professors had to submit to a great deal of inconvenience. They are capable and energetic workers who seemed to be fretting under a system of College management in which they had almost no voice. It is impossible for any College to do its best under such conditions. The Principal and Professors must have a free hand in the internal management of this College if it is to discharge its full responsibilities as an affiliated College of a University. Men of such education and ability ought to be absolutely trusted in regard to everything that concerns the efficiency of their College.

The College is provided with a good library, well arranged and evidently well used.

The general impression which we carried away with us as the result of our visit was that of a College containing excellent material in all its classes, and having on its professional staff men of academic spirit and culture, but conducted under conditions which did not leave room for the development that might be expected in an institution so well equipped in these important respects.

D. MACKICHAN.

6. TEACHERS' COLLEGE, SAIDAPET.

Visited by the Revd. Dr. Mackichan and Mr. Pedler on the morning of the 25th February 1902.

This is a College teaching for the L. T. degree of the Madras University; students taking the L. T. degree must be B. A.s, but in addition at least two other classes of teachers are trained, who are not graduates and who receive certificates.

This is a most excellent institution, well arranged and well provided with teaching appliances and thoroughly well controlled by the Principal, Mr. Hall. As Mr. Hall is submitting a memorandum on the course of instruction and training in his college, no details need here be given. We heard some of the work in the classes well done and I was well satisfied with what I saw.

There is an excellent system of airy hostels and we saw the pupil teachers being taught drill, etc. It is clear also that physical exercises are much encouraged.

There is a practising school in connection with the college. This is also very well provided with school appliances.

There is a fairly good museum and an excellent practice in it is that the pupils themselves make collections and add to the college museum.

I was much struck by the excellence of the blackboard drawing, and also of the other drawing of the pupil teachers. The science apparatus was quite adequate for all the purposes of the institution.

A. PEDLER.

The 18th March 1902.

7. COLLEGE OF AGRICULTURE, SAIDAPET.

(Situated close to the Teachers' Training College.)

This was visited by Dr. Mackichan and myself on February 25th, 1902.

There seemed to be accommodation for 30 or 40 students who work up to a College diploma and not to any University degree. It seemed to me to be only a moderately satisfactory institution, though we had no opportunity of seeing either the practical work in the farm which is attached to the College or in the Laboratories, for there was not a single student present in the buildings.

The class rooms, etc., seemed in good order and fairly well provided with teaching appliances, specimens of agricultural produce, etc.

The Laboratory for Agricultural Chemistry was fairly well provided with benches, apparatus, etc., but the arrangements rather give one the impression of unreality, and not that they were in actual constant daily use by the students. There was also a certain amount of Physical Science apparatus which was clean and in good order. The impression I formed in my visit to this institution was that the courses and arrangements generally for teaching and for practical work in Science were better on paper than in reality.

I saw no hostels in connection with this institution.

A. PEDLER.

The 18th March 1902.

BANGALORE.

CENTRAL COLLEGE.

Mr. Cooke, the Principal, showed Mr. Raleigh and myself over the College on February 23rd. It being Sunday, the Professors and students were not present. Some of the class rooms are good, but it appeared to us that a number of them are too small. The College is well equipped with apparatus for teaching Science and there is a very fair library. The College Department and the High School Department contain about the same number of students. The Principal represented to us that the working of the College is considerably hampered by the combination of the High School with it. The establishment of a High School separate from the College seems desirable.

There are two good blocks of hostels close to the college building which have been recently opened. They are under a Hindu Superintendent, and all the students resident in them, with the exception of a few Coorgs, are Hindus. There will be difficulty in making any extension of the hostels owing to want of space.

J. P. HEWETT.

POONA.

1. COLLEGE OF SCIENCE.

This institution was visited by the whole of the Universities Commission on the morning of February 27th, 1902.

It is really a College of Engineering with some extra course of lectures in Science.

The Engineering workshops appeared to me to be poor and the apparatus rather scanty, and scarcely up to date.

The drawing of the students as exhibited was distinctly good.

The Chemical Section (with its separate lecture room and laboratories) of the College is fair. Their condition shows that the laboratory is used practically, but it is not very modern. The supply of apparatus was fair only.

The Physical Science Section was not very good and the supply of apparatus rather poor. I saw no arrangements for the students to work practically at Physical Science.

The Botanical Section seemed fairly good as regards the supply of dried specimen, etc., and a few students were engaged practically with microscopic work, but there did not seem to be much backbone in the work.

Before this College can be considered a satisfactory one for the teaching of Science, a good deal of money would have to be spent in providing apparatus, buildings, etc., also trustees of a rather superior stamp to those at present at work in the College would have to be appointed. There were no hostels for students shown to the Commission.

A. PEDLER.

The 19th March 1902.

2. FERGUSSON COLLEGE.

This College was inspected by the Universities Commission on February the 27th, 1902.

The College is housed in a very excellent and well designed building and the class rooms are particularly light, airy, and well ventilated and most of them are furnished suitably. The College from the literary side seems to be doing very good work, but the science side has not been developed to any extent. The apparatus and arrangements for Chemistry and Physics are very poor, and it is clear little or no practical work or even experimental illustration of lectures is or can be attempted. The library is fairly good and seems to be well looked after.

The College has plenty of good hostel accommodation and the students' rooms are clean and well arranged.

One of the most interesting features in the Fergusson College is the fact that the staff of Professors from patriotic motives and to enable the College to be self-supporting have arranged only to receive small salaries limited to Rs. 800 a year, and on this salary Mr. Paranjpe, the recent Senior Wrangler, the Officiating Principal, is now serving in the College.

Numerically however the staff did not appear to be strong and there is not a single European in it, even as a lecturer in English.

A. PEDLER.

The 19th March 1902.

3. DECCAN COLLEGE.

The Members of the Universities Commission visited the Deccan College, Poona, on the 27th February 1902.

This college stands alone among the other Government colleges in the Bombay Presidency in being practically a wholly residential college.

The hostels for the residence of the students are large and commodious and are about to be added to, so as to enable a large number of students to attend the college. A few non-resident students only are on the rolls of the college.

The Principal of the College is provided by Government with an excellent residence close to the college, but up to the present time the other Professors reside in the town itself. A scheme is however on foot to provide residence near the college for the Professors.

The class rooms on the whole are good, dry, light, airy and large, and seem well adapted for College purposes.

The Library is also a good one, having many books, and it also possesses a large collection of Sanskrit manuscripts. The Library Hall is also a large, airy and well ventilated building.

In this college the main strength of the teaching appears to be devoted towards what may be called the literary side of education and the staff for the purpose seems large and well qualified. On the other hand, the science side of the college has not been pushed to any extent. It has but a certain amount of apparatus for the study of Physics and Chemistry and one or two small rooms have been devoted to the subjects, but the apparatus and space allotted are very inadequate for the proper teaching of these sciences and there are practically no arrangements for the students to do any practical work. The Professorial staff of the science section would also have to be considerably strengthened if good work in this direction is desired to be carried on.

Physical exercise seemed to be much fostered among the students.

A. PEDLER.

The 23rd March 1902.

BOMBAY.

1. ELPHINSTONE COLLEGE.

The Universities Commission visited the Elphinstone College, Bombay, on the 3rd March 1902.

The building is a very large one but is situated in rather a noisy part of Bombay. It is stated that it was originally erected for a printing press and not for a college at all. Hence it is not to be wondered at that the rooms in many instances do not seem well suited for lecture rooms, class rooms, etc.

The space provided for the lectures of the Professors however seems ample, though as stated above the arrangements appeared to be inconvenient and they could certainly be improved. Comparatively little has been done in the direction of developing the science side of this college and the state of affairs as regards the teaching of such subjects as Physical Science, Chemistry and Philology appears to be rather deplorable. Practical science courses are said to be taught and students are prepared for the B.Sc., etc., degrees, but they must be from a practical point of view rather of the nature of a sham.

A good deal of money has been spent on Physical Science apparatus, but it is kept carefully locked away in almirahs, and from its condition it was clear that it had scarcely ever been practically used either in the lectures or by the students. Indeed there are no working tables in the rooms devoted to Physical Science which could have been used for the practical work either of the Professor or of the students.

The state of the Chemical Section was still less satisfactory than that of the Physical Science. There was little apparatus and what there was was not kept in order and was very poor in quality. There was a slight attempt to provide two or three benches for the practical work of students, but no good work could have been done with the poor apparatus and arrangements I saw there.

There was a room devoted apparently to Biology, but it was of little or no account.

The Teacher or Professor of Physical Science is a Persian gentleman. Formerly a Professor from the Medical College came to deliver lectures in Chemistry in the Elphinstone College on an allowance of Rs. 30 a month, but this was done away with. From the little conversation I had with the Professor, or Lecturer in charge, I came to the conclusion that he himself is not a practical man at all, and I believe the instruction in science given in this college is really almost if not wholly book-work.

On the other hand so far as could be judged, the staff and arrangements for teaching the other college subjects are ample and good work apparently is being done.

The college also possesses a very good library which is well arranged in a very fine hall.

The college has a hostel at some distance from the main building. Its situation, however, is not good nor did the internal arrangements appear to be very satisfactory. Games, etc., seem to be well encouraged in the Elphinstone College.

A. PEDLER.

The 23rd March 1902.

2. WILSON COLLEGE.

The Universities Commission visited the Wilson College, Bombay, on March 4th, 1902.

The building is well situated facing Back Bay and is in a fairly quiet situation. It is a handsome structure, and the arrangement of class rooms, lecture halls, etc., is generally very satisfactory, and the rooms are large, light and airy.

The library is in the upper part of a large hall, running round what may be called the gallery. The library is of fair size only and I did not see many science books in the collection. The arrangements for teaching the literary and mathematical courses appear satisfactory and the staff seems sufficient and strong.

In the Physical Science Section there is a good deal of apparatus and much of it is modern and up to date. It appears also to be kept in use and is not simply stored as in some other places, but the arrangements for benches for the students to do practical work in Physical Science do not seem sufficient. The College teaches for the B.Sc. degree which I believe requires practical work in each Science examined in. The Chemical Section is contained in a separate building and in this there are arrangements for the students to do practical qualitative analyses but not to do quantitative work. There is a fair amount of apparatus and fairly good work should be possible here. In connection with the Chemical Section of the Wilson College, however, Dr. Gajjar has in his own residence fitted up a very complete practical chemical laboratory where excellent work of various kinds, qualitative and quantitative and including technological work, can be carried on. Students of the Wilson College, where Dr. Gajjar is or was the Professor of Chemistry, go on to Dr. Gajjar's laboratory to complete their training in Chemistry.

There is a good hostel for students at the back of the Wilson College which appeared to be clean and well arranged. It should probably be enlarged or another hostel might be provided in a rather more open space than the locality in which the present hostel is, which is close to large houses and the college itself.

A. PEDLER.

The 23rd March 1902.

3. GRANT MEDICAL COLLEGE.

The Universities Commission visited the Grant Medical College and Hospital, Bombay, on the 5th March 1902. The buildings of the College are old and not

up to modern requirements. The classes also seem to be exceedingly large and in certain subjects it would appear to be impossible for a large proportion of the students to hear the lectures or to see any experiments which may be performed. A large amount of money will have to be spent in developing the laboratories for the practical instruction of the students in the various branches of science required in the study of medicine. The chemical department is largely sacrificed to the Chemical Examiner's office and the practical chemical laboratory for the students is old fashioned though large and it cannot contain more than a fraction of the students who are said to be attending the courses. The amount of chemical apparatus for teaching purposes also appeared to be scanty. There seemed to be little practical pathological, biological, etc., work done by the students and arrangements for modern and practical work by the students of this kind were wanting.

The staff seemed large and numerous and is probably very well qualified, for while the arrangements for the practical work of the students appeared faulty, on the other hand there was clear evidence of a certain amount of vigour in the prosecution of original research by members of the staff, etc.

The only hostel is a residence for about a dozen students who may be on duty in the hospital and in midwifery, etc., cases, and the want of proper hostel accommodation for students appears to be another crying need of the institution.

The hospital need not be commented on as it is out of the scope of the Commission's enquiry, but it may be mentioned that the site of the buildings for a Medical College and specially for a Hospital seems to be almost as unsuitable as can be imagined.

A. PEDLER.

The 23rd March 1902.

4. ST. XAVIER'S COLLEGE.

The Universities Commission visited St. Xavier's College, Bombay, on March 6th, 1902.

The college is housed in a handsome stone building in an open part of the town.

The staff of Professors is large and seems ample for the requirements of the college. The class rooms and library are good, but in some cases it would appear that the class rooms must be overcrowded when the numbers said to be on the rolls are considered.

The biological collection and class rooms for this work did not give the impression that any practical work is done by the students, but it is true that the B. Sc. students and the B.A. students taking up science appear to be very few in number.

Much money has been spent on the apparatus for Physical Science and some of the pieces of apparatus are excellent. There seemed however to be very little arrangement, if any, for the practical teaching of the students in Physical Science.

In the case of the Chemical section a separate building has been erected which has been fitted up in a very satisfactory manner for practical work by the students, but it would seem that they do mainly qualitative work only as the balances did not appear to be in very good order. The arrangements for practical chemistry were however superior to those in the other two Arts Colleges visited in Bombay. On the other hand, the sets of apparatus given to the students were scanty and scarcely sufficient for a full course.

The college does not appear to possess any hostels, but the students seem to take kindly to physical exercises.

During the visit of the Commission the manner in which the students crowded into the corridor staircases, and the way in which they obstructed the passage of the members of the Commission showed that a very low state of discipline is kept in the college.

Probably the college is doing good work on the arts side, and theoretical rather than practical work on the science side except in chemistry where an attempt is made to teach practically.

A. PEDLER.

The 23rd March 1902.

ANJUMAN-I-ISLAM HIGH SCHOOL.

I visited this school on the 6th March.

It began as a mere Middle School with a Head Master and two teachers and about 50 pupils. In 1874 it was raised to the rank of a High School. Since then a very fine Boarding House or Hostel, one of the best we have visited, has been built out of funds furnished by private endowment supplemented by a grant from Government. It is called the Haji Ismail Sohani Boarding House and is intended for the benefit of Mahomedan students who wish to prosecute their studies in Bombay either in the High School adjoining the Boarding House or in any other school or college. I saw a Mahomedan student from Hyderabad in residence who was attending the local Commercial School. The building has accommodation for 40 boarders, but only 25 cubicles were occupied at the time of my visit. Each boarder has a room to himself, arrangements for light and ventilation are good, and the messing leaves little to be desired. The charges are Rs. 12 per mensem per boarder, one being admitted free of charge for every seven paying boarders. The school rooms are excellent, and well lighted. The High School section has four classes with five teachers and 76 pupils. The Middle School has the same number of classes and teaches 139 pupils. There is no Primary Department attached to the school, but it has two Primary Branches one in Bhindi Bazar and the other in Nagpada containing an aggregate of 371 pupils with 13 teachers.

Gujerati is the medium of instruction in the lower classes in the teaching specially of such subjects as Arithmetic and Geography. This is rendered necessary from the majority of pupils being sons of business men in Bombay whose mother tongue is Gujarati. Commercial Arithmetic and Book-keeping are for the same reason taught in the Vernacular Standard IV, and in the Anglo-Vernacular Standard I.

The teachers in the High School are Mahomedan graduates and non-graduates with the exception of one who is a Hindu graduate.

The school has the patronage of seven scholarships of Rs. 10, and Rs. 15 per month founded out of a couple of endowments aggregating Rs. 28,000. These scholarships are conferred on Mahomedan students in different colleges.

The school is provided with a fine library called the Karimiah Library towards which Rs. 15,000 was subscribed by Kazi Abdul Kareem. The books are housed in a fine hall equal to the best we have seen in any college or school. There is also a small laboratory attached to the institution.

A fairly well equipped gymnasium has been provided for the school and instruction is given in drill and gymnastics. The managers, represented on the occasion of my visit by Mr. Kazi Kabiruddin, complain of want of open ground near the school for such games as cricket and foot-ball.

What the school requires is a competent English Head Master, and a good number of small scholarships for the poorer classes of Mahomedans. There are members of very respectable Mahomedan families whose means are too limited to permit them to send their children to school.

It may be mentioned that altogether 27 boys have passed the Matriculation Examination and six boys the School Final since the opening of the High School seven years ago, and that the school always wins an average of three to four Government Scholarships every year.

SYED HOSSAIN BILGRAMI.

AHMEDABAD.

GUJERAT COLLEGE.

Mr. Raleigh and I visited this College on March 9th. The Professors and students were present, but it being Sunday, no work was being done. The College has been unfortunate in losing two Principals within a short time.* The Revd. Mr. Davies died in September 1900, and the health of his successor, Mr. Goodrich, broke down shortly before our visit.

The institution stands in a very good situation at a considerable distance from the town in a large open compound, which contains the college building, the Principal's house and the hostels. There is plenty of room for further extension. The class rooms are good; the institution is fairly found with scientific apparatus, and the two blocks of hostels are well built and well arranged.

Two female graduates (sisters) have been educated at the college in recent years.

J. P. HEWETT.

NAGPUR.

1. HISLOP COLLEGE.

On Monday, the 10th March, accompanied by the Honourable Mr. Justice Gooroo Dass Banerjee, I visited the Hislop College, Nagpur. This College grew out of the Free Church Institution established by Hislop, the well-known Scottish Missionary, whose name is commemorated in the designation of the College. The College to which a High School is attached is provided with a suitable building containing a large hall and airy class-rooms. There is a library and reading-room of moderate size for the use of the students of the College, as well as a Physical and Chemical Laboratory. The arrangements for the teaching of Practical Chemistry seemed to be quite adequate for the number of students pursuing the science course for the B.A. degree; but the provision of Physical apparatus was less complete, although sufficient for the ordinary class-room demonstrations.

There are three European Professors on the staff of this College; the other members of the staff are graduates of the Calcutta University. The second and fourth years' classes being absent, on account of the University examinations which were about to begin, we saw only the first and third years' classes, in all about 70 students, or one-half of the whole body of the students. We were favourably impressed by the quality of the students. They appeared to be interested in their work and to be in all respects well cared for by the College staff.

We visited the College Hostel in which a considerable proportion of the students reside. It is situated in an open space commanding a very large tank and free from the pressure of surrounding buildings. The rooms in the hostel are of good size, filled up in a simple but comfortable style. In addition to this hostel there is in another district of Nagpur a special hostel for Christian students erected in the compound of one of the Professor's houses and under his superintendence. In respect of hostel accommodation, this College appears therefore to be well equipped. Attention is paid to the physical culture of the students and in all important respects the interests of the students are attended to by Professors who enjoy their confidence and respect in a very marked degree. The Hislop College receives an annual Government grant-in-aid.

D. MACKICHAN.

2. MORRIS COLLEGE.

We next visited the Morris Memorial College. This College is maintained by the Nagpur Morris College Association which administers a fund subscribed

by the people of the Nagpur and the Chhatisgurrh Division of the Central Provinces. On the Council of this Association, the Government, the Municipality and the subscribers are represented. The College is aided both by Government and Municipal grants. Like the Hislop College the Morris College has also a large high school attached to it which is accommodated in the same building. The building is a large house with a central open court and contains a sufficient number of rooms, but as these were not originally designed for the accommodation of College classes, some of them appeared to be not very well adapted for College lectures.

The College staff consists of a number of distinguished graduates of the Calcutta University who impressed us as most zealous and enthusiastic in their work. They seemed to have the interests of their students at heart and to take pleasure in their work. The number of students whom we saw was a little less than that of those present in the Hislop College; but generally we understand the two Colleges divide pretty equally the students of the district between them.

This College also has a library and arrangements for the teaching of Physics and Chemistry. These seemed to us to be scarcely adequate for the purpose, but this deficiency, we learned, is about to be supplied in a manner which is likely to illustrate the possibilities of co-operation in University work. The Victoria Memorial, which is about to be raised in Nagpur, is to contain a well equipped Physical and Chemical Laboratory which is to be available for use by all the Nagpur Colleges. This is a new experiment the result of which will be watched with interest. It will do for all the Colleges what each cannot do for itself, and it will result in a corresponding economising of College expenditure. It seemed to us that such an arrangement as this, if found to be practicable, points the way to a solution of some of the problems now before the Commission in cases where the circumstances of the Colleges resemble those of these institutions in Nagpur.

We visited the hostel connected with the College. The hostel has excellent buildings and appeared to be very well conducted. The general impression made on us was that of cleanliness and tidiness throughout the buildings. This excellent hostel is one of the most pleasing features of this College.

We noted further that the Hislop and the Morris Colleges while dividing the field of education between them work in full harmony with each other. They observe the same rules as to fees and co-operate in a manner which seems to exclude the unpleasant rivalries that sometimes mar the relations of competing colleges.

The Morris College is affiliated also in the Faculty of Law. The fees charged in this department are slightly higher than those of the Arts classes and thus tend to strengthen the finances of the College.

We visited also the St. Francis De Sale's School which is affiliated up to the F.A. standard. As the time of our visit coincided with the recess hour, we had no opportunity of seeing the classes at work. In conversation with the Rector we learned that this institution which is intended mainly for Europeans and Eurasians is scarcely a University College in the strict sense. Very few of the pupils study beyond the standard of the Calcutta Entrance Examination. The College department is very small and fluctuating. For example, during the present year it has sent up only two candidates for the F.A. Examination.

D. MACKICHAN.

The 23rd March 1902.

JUBBULPORE.

1. GOVERNMENT COLLEGE.

The Jubbulpore College was visited on March 10th, 1902, by a deputation of the Universities Commission consisting of the Hon'ble Syed Hossein Bilgrami, and Dr. Bourne and Mr. Pedler. The college consists of three long lines of low

(single storied) buildings forming the sides of a quadrangle, while there are also proposals for the erection of other buildings to complete the fourth side. At least two-thirds of the buildings were originally intended for other purposes (dwellings, stables, etc.), but on the whole they have been well adapted for their present purpose. The whole of the college is within a high wall and the majority of the students are resident in the hostel which forms one side of the quadrangle. The Principal is also provided with a house very close to the college.

The college is only intended for small classes of students and has only one European (the Principal) on the staff, but the Indian gentlemen on the staff appear competent and good workers.

The class rooms for the ordinary lectures are only fairly suitable, but the best is done with the arrangements available. The library is scarcely sufficient even for a small college, but it is larger than in many first grade private colleges in Bengal. The arrangements and apparatus for teaching Physics and Chemistry are sufficiently good for the purposes of a small college and the Chemical Section in particular is clearly used for practical work by the students and there are benches for this work which are clearly in use. In the Physical Science side the evidence of practical work done by the students was not so marked.

The hostel contains many rooms and these were visited. They seemed to be kept particularly clean and tidy and there was an air of good discipline pervading the whole of the arrangements of the college.

A. PEDLER.

The 23rd March 1902.

2. TRAINING COLLEGE.

The Jubbulpore Training College or School was visited by one of the members of the Universities Commission (Mr. Pedler) on March 10th, 1902.

It is intended for training various classes of teachers, but as most, if not all, of them go to either primary, middle or secondary vernacular schools, this college really falls outside the scope of the enquiry of the Universities Commission. So far as it went the teaching and training given seemed satisfactory, but as the qualification for entrance into the school is only the passing of the Upper Primary Examination a large part of the work done in the institution is and has to be in the completion of the general education of the students, and not so largely in those instructions in pedagogics or in the science and practice of teaching as would be desirable.

In its way the Training College (or as it should be called School) is doing good work.

All the students reside in hostels and these seem to be well looked after, being supervised by resident teachers and the rooms are clean and in good order.

A. PEDLER.

The 23rd March 1902.

PATNA.

1. GOVERNMENT COLLEGE.

This College was visited on the 11th March 1902 by the Hon'ble Syed Hossein Bilgrami, Mr. Pedle and Dr. Bourne.

The class rooms, though fairly satisfactory, are not as good as they should be.

The library contains a number of books, but they are badly arranged and there are numerous desiderata. The Chemical and Physical Department, in a separate building, is being reorganised and provided with gas, and bids fair to be a small but excellent one. There is no boarding house.

A. G. BOURNE.

2. BEHAR SCHOOL OF ENGINEERING.

This institution was visited on the 11th March 1900 by the Honourable Syed Hossain Bilgrami, Mr. Pedler and Dr. Bourne.

The College building is excellent and stands on large grounds of its own. There is a large workshop with steam power and arrangements for teaching forging and fitting, carpentry and simple joinery. A great deal of the furniture of the College has been made in the workshop.

The officer in charge has residential quarters but there are none for the students. There are classes for Amins, Sub-Overseers and Overseers, and it is intended to develop an engineer class. The officer in charge at present is evidently a thoroughly practical man and good work is being carried on.

A. G. BOURNE.

3. BEHAR NATIONAL COLLEGE.

A deputation of the Universities Commission inspected the Behar National College and Collegiate School at Bankipur on the 11th March 1902. The deputation consisted of the Honourable Syed Hossain Bilgrami, Dr. Bourne and Mr. Pedler.

The College is situated in the upper floor of a pucca building in the town of Bankipur and the school is in the back half of the lower floor, the front half of the lower floor being let off in small shops.

The College is a 1st grade one, teaching the Science courses in the B. A. and also M. A. courses in Mathematics, etc., though the Science M. A. course has, I believe, not yet been attempted.

The rooms and furniture, etc., of the College class rooms are poor and dirty. There is practically no library and the so-called library seems to consist of one small almirah of books, mainly text-books. The arrangements for teaching the Science courses (Physics and Chemistry in the F. A. and B. A.) are almost grotesque. A science lecture in Chemistry had been arranged for, but as the apparatus had been prepared on the lecture table, it was clear the experiments would be quite unworkable. There was scarcely a decent piece of apparatus for the teaching of Physics and Chemistry in the whole of the so-called collection of apparatus, which was also so small and meagre that it was not fit for an F. A. College, and the condition of affairs generally was most pitiable. Nothing was in order and nothing was clean.

There is no hostel attached to the College.

The registers of the College classes were examined and were found to be badly kept. They suggested great laxity in the matter of the attendance of students and grave doubts as to whether the rules of the University are strictly observed in this College.

The school rooms are overcrowded, dirty and badly ventilated.

Neither College or School is worthy of being connected with the University in any way.

The numerical strength is as follows :—

1st year class	42	2nd year class	160
3rd year class	11	4th year class	46

The 160 in the 2nd year includes 30 failed students of last year.

First and third year students are promoted *en masse* although there is an annual examination.

Failed students of the F. A. re-join the College on the 17th of September.

Second and Fourth year students get preparation leave for two months. But if no leave was given they would all keep away after their applications had been sent to the Registrar and their names registered as candidates for the forthcoming F. A. and B. A. Examinations.

Three-fourths of the number on the rolls are Beharis and about a fourth Bengalis domiciled permanently or temporarily in Behar.

A. PEDLER.

The 24th March 1902.

CALCUTTA.

1. PRESIDENCY COLLEGE.

The Commission visited the Presidency College on Thursday, the 13th March, and were shewn over the college by the Principal and several of the Professors. The Second and Fourth year classes being absent in view of the University Examinations about to begin, we saw only a few classes at work; but we were able to make an inspection of the whole of the building. The college is housed in a large and imposing building and the accommodation provided for the various classes leaves nothing to be desired except, perhaps, a greater attention on the part of the College authorities to those little things in the condition of a class room and its fittings that make for neatness and order and have thus an educative value. To some extent the appearance of want of arrangement was due to the confusion caused by the setting apart of the college rooms for the University Examinations. The inconvenience caused by this periodical use of the college building was manifest and it seems to us to be a matter for very serious consideration whether the Calcutta University should permit the college work to be thus annually dislocated.

We were prepared to find in this college a very complete equipment in the Departments of Chemistry and Physics and we were not disappointed. We passed through the extensive Chemical laboratories and noted with admiration the many ingenious contrivances provided for rendering them and the attached lecture rooms comfortable and suitable for the work of large bodies of students. We doubt whether it would be possible to find any University in the West more completely equipped in these respects than this college on which the Bengal Government must have expended its funds with a liberal hand. Appliances exist in abundance for chemical research. We met one of the Assistant Professors, Dr. P. C. Roy, who had availed himself of these facilities to excellent purpose and had made important contributions to Chemical Science. These laboratories were kept in good order and were in much better order than most others we have seen; but yet they shewed signs of having deteriorated from the high standard of excellence, which must have characterised them when they were first completed and which with the proper amount of attention might easily have been maintained.

In the Physical Department we found an ample provision of working laboratories and apparatus. A number of students were busy at practical work. Here also as in the Department of Chemistry there is an excellent equipment, although the various rooms are more scattered and the arrangement less compact. In these laboratories also important research work, such as that of Dr. Bose, has been accomplished. The existence of these Physical and Chemical Laboratories is a sufficient answer to the demand for opportunities for research; they are quite ample to meet the wants of the Calcutta University for years to come.

Attached to the Mathematical Department is the Astronomical Section which is equipped with all the essentials of an observatory which is intended to be mainly a means of instruction. The transit room is well devised and liberally provided with instruments.

We saw also the beginnings of a Natural Science Department which under the present management promises to develop into a most useful addition to the scientific equipment of the college.

There is a very large College Library which is extensively used by the students of the college and is maintained in excellent condition.

We next visited the Eden Hostel in which a large number of the students of the college reside. This is an extensive building including a spacious courtyard and capable of accommodating about 250 students. It is under the management of a mixed committee of which the Principal of the college is the Chairman and several of the Indian Professors are members. This building contains a number of large airy rooms, but those sections of the building in which these rooms have been subdivided into cubicles impressed the Commission rather unfavourably. It is obvious that in a hostel of such dimensions vigorous efficient supervision

is most necessary. Of such supervision, I regret to say, we could detect no trace. An air of general untidiness pervaded the whole place and it was evident that a firm superintending hand was wanted to bring things into proper shape; for only well superintended hostels can be considered an advantage either to students or to colleges.

The 27th March 1902.

D. MACKICHAN.

2. UTTERPARA COLLEGE AND SCHOOL.

Visited on the 15th March by the Honourable Syed Hossain Bilgrami, and Dr. Bourne.

We were conducted to the college by the Principal. Rajah Peary Mohan Mukerjee received us and took us over the College and High School.

The college is only affiliated up to the F. A. standard. It was founded in 1887. It is a private institution and does not receive any aid from Government.

The number of students on the rolls is—

First year class 34. Second year class 42 including failures (about 10) of last year's F. A. The average number on the rolls last official year was 56, and the average daily attendance 48.8.

The test examination is held in January. A very low test is enforced so that most of the students pass. Those who are not able to pass even this test are held back, but it is quite possible for them, said the Principal, to evade rules and appear for the examination. Some private colleges will help them for money.

Subjects taught here comprise the usual F. A. Course with History or Logic as optional subjects and Sanskrit as the second language. There are only two lecturers and a Pandit. Students are allowed to take up either History or Logic so that some take up one subject, some the other. Lecturers have to work very hard. One takes English, History and Logic, the other takes Mathematics, Chemistry and Physics.

The equipment for the teaching of Physics and Chemistry is rather poor, but quite enough for the curriculum prescribed. There is no practical work, the lecturer performs experiments and the pupils learn from text-books.

There is a High School close to the college. It was established by Rajah Peary Mohan's father in 1846 and afterwards made over to Government. It is now a Government Institution. It is a very well conducted High School, the students are very well taught. The attendance is large. There is a good library in the school presented by the Rajah. There is no hostel attached either to the school or the college. Our impression on the whole was rather favourable than otherwise. The Principal was very frank in his statements and there was no pretence about the place of any sort. It is, however, a lifeless institution.

The Proprietor gives away something between Rs. 70 to Rs. 83 month by month in gratuities of a rupee each to the boys and he recovers from them a fee of Rs. 4 each, so that some students pay Rs. 4 and some only Rs. 2 per month. I was not able quite to understand the object of such an arrangement except that perhaps the monthly gratuities attract students.

SYED HOSSAIN BILGRAMI.

3. RIPON COLLEGE AND SCHOOL.

The members of the Universities Commission visited the Ripon College and Collegiate School, Calcutta, on March 17th, 1902. This is a large first grade college affiliated to the Calcutta University up to the B. A. and M. A. degrees and which during last year applied to the Calcutta University for affiliation up to the B. Sc. degree, but this was refused. It is also affiliated in Law for the B. L. Degree. No less than about 1,400 students are in attendance here;

it was stated that there were roughly 400 students in the school, 500 in the college and 500 attending the Law classes.

The building occupied by the college had been newly white-washed both outside and inside and in the case of the latter the walls were still wet with the white-wash. The floors had also been newly repaired for the occasion. It is clear that the visit of the Universities Commission to Calcutta is doing some good as I am informed many of the private colleges are being white-washed at present.

The staff consists entirely of Indian gentlemen and several of them have the highest possible degree, so that the tuition should be the best of its kind so far as theoretical teaching is concerned.

The building however is quite unsuitable for a college and school and with its present number of pupils it must be much overcrowded. If the school were removed to some other place there might be a chance for the college students in the building. Many of the class-rooms were much overcrowded and there was little light and air and the teaching appliances were poor with, very inferior black-boards, etc.

The arrangements for teaching literary subjects, Mathematics, etc., might be passed, for the professors seem well qualified, but in the case of the Science courses though the professors are qualified men they are not given either the accommodation or the appliances which are necessary for really effective teaching. One room is devoted to Physical Science work and the Commission found a considerable number of pieces of Physical Science apparatus neatly arranged on a few tables which had been covered for the occasion with red and white cloths. Work was impossible under the conditions and it did not look as if the apparatus was used by the students at all and possibly not very largely used even by the professor. One member of the Commission asked where the apparatus displayed was usually kept and was told in the almirahs round the room which were however fairly well filled already with old apparatus. It did not appear that there was any arrangement for a lecture-room with a properly arranged table for lectures in Physical Science.

A small room has recently been arranged for the practical work of a few students in Chemistry, but it is an inconvenient room with very poor appliances and very little apparatus. I do not think that good practical work could possibly be done by the students in the so called chemical laboratory and again there did not appear to be any properly arranged room for giving experimental lectures in Chemistry.

One small room is called the library and contains three or four almirahs with books of reference, etc. It is too small a collection for a college of this size and the room could scarcely be used by students for reading and studying as there were no tables for them to sit at. I visited the college last year at the request of the Calcutta University and the number of books was then very much smaller even than it is now. There is no hostel attached to this institution.

A. PEDLER.

The 25th March 1902.

4. GENERAL ASSEMBLY'S INSTITUTION AND SCHOOL.

The members of the Universities Commission visited the General Assembly's College and Collegiate School on March 18th, 1902. The institution is contained in a large, commodious and airy building situated in an open place overlooking Cornwallis Square. The college is affiliated up to the B. A. and M. A. Degrees of the Calcutta University, but it is not affiliated in Law.

The staff consists of about five European Professors and perhaps eight or nine well qualified Indian Professors, who were mostly present at the visit of the Commission. The staff seems therefore an efficient one.

The classes in some of the rooms are very large and might possibly with advantage be sub-divided. There appeared to be a difficulty in the matter of students seeing and reading what was written on some of the black-boards, some of which were small and inconvenient and the writing on them did not show much knowledge of this branch of the art of teaching on the part of at least one of the professors.

Probably, however, the classes are very satisfactorily taught in all Arts subjects, Mathematics, etc., but the arrangements for the teaching of Physical Science and Chemistry are very inadequate. The supply of apparatus is small; indeed much too small either for fully experimental lectures or for practical work by the students, and no properly equipped accommodation is given either for Science lectures or for the student's work. Better arrangements should have been provided for the students taking up the Honours Course for the B.A. degree in Science, and they are manifestly inadequate for teaching the B.Sc. Courses.

The library is rather a good one, is in a large, airy and light room and appears to contain a good and valuable collection of books.

The Collegiate School appeared to be in good order.

The Lady Jane Dundas Hostel was visited; it will accommodate about 40 resident students, and it is a most excellently arranged and very well managed institution. It is one of the best hostels in Calcutta.

A. PEDLER.

The 25th March 1902.

5. ALBERT COLLEGE.

A deputation of the Universities Commission visited the Albert College and Collegiate School on March 19th, 1902. The gentlemen present were the Honourable Mr. Justice Banerjee, the Honourable Syed Hossein Bilgrami, Dr. Mackichan, Dr. Bourne and Mr. Pedler.

The institution occupies a peculiar position in Calcutta, as it was started by the late Babu Keshab Chandra Sen with a distinctly religious (Brahmo Samaj) teaching in addition to ordinary instruction, and this religious teaching has been kept up to the present time. The institution has also received rather large benefactions from Government and from various Native Princes, etc., so that it ought to be in a flourishing condition.

The school department scarcely concerns the work of the Commission, but the arrangements were not good, and generally the place was dirty, in bad repair and badly arranged. The college is only a second grade one, that is, teaching up to the F.A. Examination, and consists of two class rooms and one or two smaller rooms. It was difficult to judge of the strength of the college staff, but it seemed usual.

The students seem largely composed of the failures from other colleges.

The arrangements for the college class rooms were poor and the appliances for teaching were scanty. In the matter of teaching, the classes, Physical Science and Chemistry, which are compulsory for the F.A. Examination, the arrangements were exceedingly poor and no proper teaching could possibly be done with the apparatus, etc., shown to the members of the Commission.

Even considered as a second grade college, these arrangements are much too scanty and too poor in quality.

There seemed to be no library for the students.

No hostel has been provided for the students.

A. PEDLER.

The 25th March 1902.

6. CITY COLLEGE.

A deputation of the Calcutta Universities Commission visited the City College and Collegiate School on March 19th, 1902. The deputation consisted

of the Honourable Mr. Justice Banerjee, Dr. Mackichan, Dr. Bourne and Mr. Pedler.

This is a first grade college teaching up to the M.A. degree and it is also affiliated in Law.

The institution is housed in a large and very lofty building situated in College Square. Probably the height of the building is necessitated by the high cost of ground in the locality, but it would have been better for a college if the building had extended over a larger area and had not been so lofty. It is not well suited for college classes. The college and school buildings were being used for the University Examinations at the time of the visit of the Commission, and hence it was difficult to form a correct idea of the working of the college. The rooms are some of them large, but not of the shape, height, etc., desirable for large classes. Some of the ground-floor rooms also were exceedingly dark and badly ventilated. These seemed to be used for school classes; also a few spaces were partitioned off as rooms for Persian, etc., classes in the college. They were most unsuitable. No opportunity was given to judge of the sufficiency of the staff or of the arrangements made for the classes.

The Commission were shown the arrangements for teaching Physical Science and Chemistry. They were very inadequate and unsatisfactory and the college should really not have been affiliated in the B. Course of the B.A. degree (in Science). The apparatus and arrangements were really of too limited a nature even to teach the F.A. classes properly in Physics and Chemistry.

No hostel appears to be attached to the institution and there was no library to speak of.

The 26th March 1902.

A. PEDLER.

7. MEDICAL COLLEGE.

The Commission visited the Medical College on the morning of the 26th March.

This is at present a combination of the old and the new. The Anatomical and Chemical Departments are new. The former is excellent both in the arrangements for dissection and in having an ample supply of diagrams and models and specimens in the Museum attached. In the Chemical Department there are signs that here, as in the Medical Colleges in Madras and to an even greater extent in Bombay, the teaching arrangements are sacrificed to the Chemical Examiner's Office.

There is nothing modern about the Physiological and Pathological Departments which are badly in need of new buildings and of modern appliances.

A Bacteriological Department has been recently organised and is for the present housed in one of the old buildings.

The library appears to be well supplied with books, but there is no suitable accommodation for students to read in the College.

There is no evidence that any original work is carried on in the College.

Excellent quarters are provided for the Military pupils and these appear to be well looked after. Strict discipline is apparently maintained. No quarters are provided for the other students. The arrangements for clinical instruction are doubtless ample.

A. G. BOURNE.

8. ST. XAVIER'S COLLEGE.

A deputation of the Universities Commission visited the St. Xavier's College in Park Street, Calcutta, on the 21st March 1902. The deputation consisted of the Honourable Mr. Justice Banerjee, Dr. Mackichan, Dr. Bourne and Mr. Pedler. This is a first grade college teaching up to the M.A. degree if necessary, but it is not affiliated in Law.

The building was apparently formerly a theatre and has been altered to suit the requirements of a college. The neighbouring house has also been added to the college to accommodate the Physical and Chemical sections.

The college class rooms are usually good and commodious and they are also light and airy.

The Library is also a good one. The staff generally is a strong one and is almost entirely composed of Europeans.

In the case of the Physical Science section there is a good lecture theatre and very large sums of money have been spent in the purchase of apparatus and it includes apparatus designed to illustrate the most recent discoveries in Physical Science. It is to be regretted, however that almost the whole of the apparatus is of the kind required only for experimental lectures to the students and to popular audiences, and there is very little apparatus of the kind required for the practical work of the students themselves. Indeed there seemed to be no tables, etc., in which such practical work by the students could possibly be carried out.

In the Chemical section there is again a good lecture theatre well fitted up and with the appropriate rooms for preparation of the experiments for the lectures, etc., and for the private analytical, etc., work of the professors. There is also a fairly large supply of apparatus, chemicals, etc. It was said that there is a small room devoted to the practical work of the students; but the members of the Commission were not shown this room, and it appeared that the main strength of the college in this department was thrown into experimental teaching and that little is being done in the way of practical training of the students in Chemistry.

There is also a very good nine-inch telescope in an observatory and it has an excellent solar spectroscope, etc., belonging to it, but again here there did not appear to be many signs that students could be practically trained in astronomical or solar spectroscopic work.

There is a large school attached to the college and it contains a large proportion of Eurasians. Some of the Commission were also shown the library of the late Archbishop Goethals. It contains mainly works in India and is a most valuable and excellent collection. It contains a very large number of volumes and is placed in an exceedingly fine-looking building, which is fitted up in the most complete manner possible.

We were not shewn any hostels attached to the college.

A. PEDLER.

The 26th March 1902.

9. SIBPUR CIVIL ENGINEERING COLLEGE.

The Commission visited this College on the morning of the 22nd March.

This is in many ways more what a College should be than any other College visited.

The buildings are excellent and are situated in enclosed grounds of considerable extent; all the staff and all the students are in residence.

The students' quarters are good, although perhaps not kept quite as clean as they might be. It is doubtless a matter of extreme difficulty to make the students attend to such matters. One building is set apart as a hospital. The buildings are lit by electricity and will be provided shortly with electric fans. The power is developed in the workshops and the plant forms an important part of the teaching apparatus. The Chemical laboratories are thoroughly well adapted for Chemical work especially in relation to Engineering and Agriculture. The Physical laboratories are evidently well cared for and adapted for real work. The engine house is provided with steam, oil and gas engines which are so arranged as to be available for study as well as for the development of

power for the workshops. The forges and foundry are well arranged. Good work is turned out in the shops in both wood and metal. Much furniture and apparatus is made for the College and lathes and other machines are made for the Behar School of Engineering and other technical institutions. The interests of the students do not, however, appear to have been in any way overlooked for the sake of turning out work. Plots have been set aside for Agricultural work, but the soil is unsuitable for a regular experimental farm and the Agricultural Department will be removed elsewhere when opportunity offers.

A. G. BOURNE.

10. BANGABASI COLLEGE.

The Honourable Mr. Justice Banerjee, Mr. Pedler, Dr. Mackichan and Dr. Bourne visited the Bangabasi College on the 26th March.

The class rooms are very crowded and ill-ventilated. It is expected that the College will shortly acquire a new building. Physics lectures are delivered in the College and there is a small collection of lecture apparatus. Practical work in this subject and in Chemistry is said to be carried on in the laboratories of the Indian Association for the Advancement of Science. There is a real and laudable attempt to teach Botany on a small scale. Two students are now working at the subject. A couple of compound microscopes and a few instruments and books are available and a few diagrams of Indian plants have been prepared on the spot, but the whole thing betrays ignorance of the way in which the subject should be taught.

The Principal and staff are evidently very energetic and know their students individually and there appears to be a very healthy tone about the place. There is a small law class of 40 to 60 students which it is said is not a sufficiently large number to cover the expenses.

There is nothing of the nature of a College about such an institution ; it is a " coaching " establishment, but probably one of the best of its kind.

A. G. BOURNE.

11. CALCUTTA ACADEMY.

A deputation of the Universities Commission visited the Calcutta Academy on March 26th, 1902.

The deputation consisted of the Honourable Mr. Justice Banerjee, Dr. Mackichan, Dr. Bourne and Mr. Pedler.

The Calcutta Academy is a High School recognised some years ago by the Calcutta University for the purposes of sending up pupils to the Entrance Examination.

The staff appears to be a weak one having only one graduate on it. The salary of the staff varies from Rs. 40, the pay of the Head Master, to Rs. 15, the pay of the lowest master.

The building had been quite recently repaired, the walls having been painted and white-washed, and the floors repaired, etc., just before the visit of the Commission. Indeed the walls were still quite wet with the colour wash. The windows, etc., were, however, still in a filthy dirty condition.

Some of the black-boards were in the corners of the rooms ; others had no chalk with them and had been little used lately as was shown by their condition.

The library of the school consisted of a few books in an almirah in the office room.

Two split bamboo partitions had been put up between classes occupying the same room in at least two instances. Some of the classes were being held in what appeared formerly to have been the stable and the coach house of the premises, and it was almost impossible for some of the boys to see in some of the class rooms.

The school is said to be attended by about 250 boys.

I have seen many recognised High Schools in which the accommodation, sanitary surroundings, etc., are much inferior to those of the Calcutta Academy.

A. PEDLER.

The 26th March 1902.

12. METROPOLITAN INSTITUTION.

A deputation of the Universities Commission visited the Metropolitan Institution on March 26th, 1902. The following were the members of the Commission present: The Honourable Mr. Justice Banerjee, Dr. Mackichan, Dr. Bourne, and Mr. Pedler.

The college is a first grade one teaching up to B. A., M. A., and B.L. In the B.A. Courses the B. Course or Science (with Honours) is taught.

The building is a large and commodious one and the rooms are light and airy and they are well suited for class teaching.

The building has undergone repairs, white-washing, etc., within the last few days and the paint on the doors, etc., was still wet.

So far as can be judged the staff is a good one, and the general arrangements for teaching the usual courses seem fairly satisfactory.

There is a practical class room for Chemistry with space for eight students working at once and there is the appearance that such work is regularly carried on. The supply of Chemical apparatus, etc., is however not very large.

There is a small or moderate supply of apparatus for teaching Physical Science, but several of the pieces of such apparatus which I tested were out of order. There did not appear to be any place where the students could use this apparatus practically and it is clear the students only see experimental lectures in the ordinary class-rooms and do not work themselves. The teaching of the Science Courses is therefore capable of considerable improvement. There is a good library kept in a fairly convenient room. So far as could be judged there would be about 3,000 or 4,000 volumes of books.

There does not appear to be any hostel in connection with the Metropolitan Institution.

A. PEDLER.

The 26th March 1902.



13. INDIAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

Four members of the Commission—The Honourable Mr. Justice Banerjee, Mr. Pedler, Dr. Bourne and I—visited the laboratories and lecture hall of this Association on Wednesday the 26th March. Passing out of noisy Bow Bazaar we entered a quiet compound containing a spacious hall and large well lighted apparatus rooms. The buildings were in good order and made a favourable impression on the visitors. We were shewn over them by the son of Dr. Mahendra Lal Sirkar, the well known founder of the institution. The lecture hall is the best thing of its kind we have seen in Calcutta. It contains accommodation for an audience of 600, each seat commanding a view of the lecture table.

The Association is unique in India. During a quarter of a century it has done much to popularize the study of physical science in Calcutta and to develop a taste for scientific study among the students of the Calcutta University. We found the institution plentifully provided with the apparatus which lends itself to the popular presentation of scientific knowledge. The collection contained many pieces of apparatus illustrating the more recent advances of physical science. We observed that while on the whole the apparatus was well arranged and well preserved; a number of instruments had been allowed to fall into disrepair and were evidently not much used. The Chemical section was not equipped on the same scale as the Physical and seemed to occupy an altogether subordinate place.

We understand that in addition to the purpose already indicated the Association aims at providing facilities for practical scientific work and that its resources are at the disposal of Colleges for this purpose. We were interested therefore, to learn how far this object had been attained. We were disappointed, however, to find that the laboratories gave little indication of having been used for this important purpose. With the exception of a limited provision of the means for practical work in Chemistry we found none for practical study generally and no proof of such work having been seriously attempted. This has been sacrificed to the more popular aim. This is a matter for regret inasmuch as scientific education has been sufficiently popularized. What is wanted is to develop the study on its practical side. The really educative function of the Association according to present day requirements has not been seriously attempted. In order that the Association may be a real help to University education it must address itself to the task of putting within the reach of the Calcutta students the means of practical investigation. If well organized on such lines it might supply a want manifest in many of the Colleges and might help to elucidate the present problem of adjusting the University and its Colleges to the high demands which scientific education is now making. How this can best be done is a question which the Association should now consider, and also to what extent it is necessary that the Association should have a staff of lecturers entirely devoted to the work of rendering its appliances available for the real ends of scientific instruction.

There was a time when the preparatory task of popularizing these branches of study was a pressing necessity and this Association deserves the greatest credit for all it has done in this direction. But if it is to maintain its tradition it must now apply itself to the task of meeting the present real need. Unless this is done its valuable collection of apparatus will produce little abiding result.

D. MACKICHAN.

The 28th March 1902.

KURSEONG.

TRAINING COLLEGE.

Along with Mr. Pedler and Dr. Bourne, I visited this institution on the morning of Saturday, the 29th March. This College is associated with two High Schools for Europeans and Eurasians—the Dowhill High School for girls containing 80 pupils and the Victoria High School for boys with about 200 boarders. In the Training College, which has its lecture rooms and practising classes in the Victoria High School, we found 9 lady teachers under training and 7 Bengali Masters, 6 from Bengal and 1 from Cooch Behar. These are instructed by Mr. Delaney, the Principal of the College, in the theoretical branches of educational science, and have regular opportunities afforded them of practising their art in the classes of the High School. We had an opportunity of hearing one of these lessons given by one of the ladies and of listening to the criticisms of the students and the Principal. It was evident that these students were being trained by a most competent master who might be expected to communicate something of his own enthusiasm to his students. Of special advantage to these students is their temporary association with what is really a model High School under most efficient management and conducted according to the most advanced methods. The discipline of the school is admirable, and the atmosphere of brightness and happiness pervading the whole place could not escape our notice. The institution is accommodated in a very fine building situated at a height of 1,000 ft. above Kurseong and thus at a level of nearly 6,000 ft. Isolated from dangerous surroundings and enjoying a splendid climate, the pupils of these schools have advantages that cannot be surpassed anywhere in India. These advantages are shared by the Training College.

It is carried on with a two-fold purpose, *vis.*, to train as teachers European and Eurasian young men and women, and to fit certain selected Bengali headmasters to take charge of training institutions of a lower grade in various parts of the province and thus help to produce an efficient class of Bengali teachers

for the schools throughout the Presidency. There were no European or Eurasian young men under training. It appears to be most difficult to attract this class to educational work. The Bengali gentlemen seemed to enjoy the special training for which they had been selected, and will, no doubt, when they are planted out in other institutions, help to a wider diffusion of a sound knowledge of educational methods. They had been carefully selected with a view to this special end. They reside in a house specially provided for them within the precincts of the Boy's High School, while the lady students reside at the Dowhill Girl's Schools at a distance of about a mile from the College. There they are under the care of the Lady Principal and her assistants, in whose quarters they find accommodation.

After an inspection of the work and the favourable circumstances under which it is carried on, our only regret was that more young men and young women had not availed themselves of these exceptional opportunities for obtaining a sound and useful training.

D. MACKICHAN.

BENARES.

1. QUEEN'S COLLEGE.

The Commission held its sitting in this College, which possesses an excellent and rather handsomely designed building, on the 2nd April 1902. It is of moderate extent but probably sufficient for the purposes of the College, which has a roll of over 80 under-graduates in addition to the 300 Sanskrit students who sit at the feet of the learned pandits of the Sanskrit College, which is conducted during the morning hours in one section of the building. As we entered the central hall of the College, we witnessed a picturesque spectacle—twelve pandits standing each beside the group of students who had attached themselves to his instruction. These pandits represent several Indian nationalities. We found among them at Bengali scholar, two Marathi-speaking pandits, some from the Madras Presidency, and the rest from the Hindi speaking districts. Judging by the numbers grouped around each pandit, one could see that certain teachers of their subjects enjoyed a greater popularity than others. Many of these pandits are specialists in the various branches of Hindu learning—chiefly in Grammar and Philosophy.

As a College affiliated to the University of Allahabad, Queen's College teaches up to the M. A. Examination. Its affiliation has been extended to include Science and Law. There is a boarding house attached to the College for the accommodation of students coming from outside Benares and a High School conducted in a separate building under the supervision of the Principal.

As all the almirahs containing the science apparatus were shut, we had no means of judging of the equipment of the College on this side. It is manned by a very able staff of professors, the comparative smallness in the number of the students being due to the competition of the Central Hindu College, which was affiliated to the Allahabad University in 1899, and which receives students at very nominal fees.

D. MACKICHAN.

2. CENTRAL HINDU COLLEGE.

We visited the Central Hindu College at Benares on the 3rd of April 1902.

The College is located in a large building, which, though not originally designed for an educational institution, has by subsequent addition and alteration been so adapted as to furnish sufficient accommodation for the College and the School connected with it.

The teaching staff appears to be quite adequate, and the College has a decent library, and a well equipped physical and chemical laboratory with arrangements for practical work by students.

The hostel attached to the institution is a commodious one with a spacious courtyard in the middle, and there is a large play-ground for recreation.

The College is affiliated to the University of Allahabad up to the standard of the Intermediate Examination ; and an application has, we are informed, been made for its affiliation up to the B. A. standard.

The object of the institution is to impart secular education to deserving poor students at a low fee, and to impart non-sectarian religious instruction to Hindu students, according to the doctrines of Hinduism.

The institution is supported by fees and the funds raised by public subscriptions, and is under the control of a Managing Committee.

GOOROO DASS BANERJEE.

ALLAHABAD.

1. MUIR CENTRAL COLLEGE.

The Muir Central College at Allahabad was inspected by the Indian Universities Commission on the afternoon of April 4th.

The building is an exceptionally good one standing in large open grounds well walled in. Indeed the College buildings and grounds are far superior to anything the members of the Commission have yet seen in India with the possible exception of the Deccan College at Poona.

The Library is a large one and is accommodated in a very suitable hall which is well arranged and well decorated. It forms altogether a most suitable Library for a College of this kind.

The class rooms are large and airy and leave little to be desired.

The arrangements for teaching Physical Science and specially the part devoted to the practical work of the students is extremely well arranged and indeed most elaborate. This section is very well supplied with apparatus and a large part of the apparatus used by the students is made in the College workshop attached to the Physical Laboratory. In this workshop some extremely good work was being done, such as the manufacture of spectroscopes, etc., etc.

The Physical Science section is indeed superior to that of any College in India.

The chemical section of the Muir College has also been developed to a very high degree, and the arrangements both for lecture purposes and for the practical work of the students are as good as can be desired and indeed as good as can be possibly arranged in India. This section is as good as anything of the kind in India and as good as can be found even in large towns in Europe.

The staff of the College also appears to be a very strong one, and the College should do exceedingly good work.

The weak part of the College is in the Hostels which are small, rather ill arranged, not very clean and apparently not very well controlled. This side of the College is in need of development and this will naturally require the expenditure of more money.

Athletics seem to be well looked after in the Muir College.

A. PEDLER.

The 15th April 1902.

2. KAYASTHA PATHSHALA.

This College, affiliated up to the Intermediate Examination, was visited by the Commission on the afternoon of the 7th April. We found the institution occupying an excellent site and provided with very suitable buildings accommodating a High School, a College Department, and about 30 or 40 Kayastha students in residence. The accommodation provided for these students was

good, and the class rooms were also in good order. The stock of apparatus possessed by the institution appeared to be quite adequate for the purposes of the College. As is generally the case, some pieces of apparatus were out of order, but not as the result of disuse. The apparatus showed signs of being regularly used.

This College occupies a peculiar position, being in its original intention a benevolent institution provided by the liberality of Munshi Kali Prasad for the education of the Kayastha community. The rate of fees is low, and there are numerous free scholarships for poor students, especially of the Kayastha community. Pupils and students of other castes are not excluded from this institution, but it is mainly a Kayastha School and College having both the advantages and the disadvantages of a sectional institution. The proceeds of the original endowment that are available for purely educational purposes enable the College to support itself with the aid of the fees paid by the students. The whole aspect of the buildings, class rooms, and college compound gave the impression of a place that was cared for, and was not unduly pressed by difficulties of finance. It, no doubt, fulfils a very useful function, and is at present the only non-government College in Allahabad.

D. MACKICHAN.

3. CENTRAL TRAINING COLLEGE.

The Central Training College for teachers in Allahabad was inspected by the members of the Indian Universities Commission on the morning of April 8th. It consists as usual of the buildings for the Training College and for the High School which is used as a practising school. The buildings are not very well adapted for a Training College, but the internal fittings and arrangements are good. The science teaching seems rather well done. The usual arrangements for teaching pedagogics are carried out and about one-third of the time is devoted to teaching general subjects and two-thirds to pedagogics. The students are made to give model lessons in the attached High School. The method of teaching is very practical and was well exemplified in the teaching of Geography.

The drill exercises are good.

The Hostels are particularly well arranged and they are perhaps some of the best seen by the Commission.

The Training College on the whole is, however, not so good as that at Saidapet in Madras.

The 15th April 1902.

A. PEDLER.

LUCKNOW.

1. REID CHRISTIAN COLLEGE.

The Commission visited the College on the 10th April.

A small college with good class rooms. The only special feature is the so-called "business department" where commercial instruction, including shorthand and type-writing, is given. The boarding house occupies three sides of a quadrangle and is under the supervision of the Principal whose house is near by.

A. G. BOURNE.

2. ISABELLA THOBURN COLLEGE.

This College was visited on the 11th April 1902.

It consists of a school and college, with boarding accommodation for both. It is under the patronage of the American Methodist Mission and was presided over until her death last year by Miss Isabella Thoburn.

The College Department has the usual four classes with 20 girls distributed unevenly among them. Only 10 girls were in attendance when the Commission visited the institution, the other 10 having gone up for their B. A. and Intermediate Examinations.

The College has a competent staff of lady professors with an excellent boarding house under the supervision of the Lady Principal.

The High School attached to the College has about 80 girls on its books, with a staff of 12 teachers.

Connected with the institution are training classes in which girls are trained to go out afterwards as teachers. Special facilities are offered to any who wish to prepare for Medical Schools. These latter generally join the Medical College at Lahore.

The boarders are mostly Europeans, Eurasians, or Native Christians with one solitary exception, a little Mahomedan girl in the Infant or Kindergarten class, who has been sent to the institution by her parents from Rampur.

The building in which the School and College classes are held is well suited to their requirements. The accommodation for boarders both of the School and College Departments is ample. The charges range from Rs. 16 to Rs. 5 according to the kind of accommodation offered, the cheaper rooms meeting the needs of the poorer classes of girls whose parents cannot afford to give them an expensive education.

The laboratory fitted up for the College seems to be suitable for the science teaching of the Intermediate classes.

On the whole, the impression left in our mind was that the College fully answered the purpose for which it was founded.

Being the only college of its kind in India, with the exception of the Bethune College, Calcutta, the facilities offered here are taken advantage of by girls from all parts of India, such as the Central Provinces, Central India, Hyderabad, etc.

SYED HOSSAIN BILGRAMI.

3. CANNING COLLEGE.

The Commission held their sitting in this College on the 11th April and went over the building on the same day.

A large college with fine class rooms and a splendid hall. A very good library, the books were arranged all round the room and not shut up in almirahs ill-adapted for the purpose, as is so often the case. A special feature is the thoroughly well organised Physical Department fitted with apparatus suitable for test work, all toys being studiously excluded. A workshop is attached, and from it some very fine work is turned out. There is no boarding house.

A. G. BOURNE.

AGRA.

1. AGRA COLLEGE.

This College was visited by Mr. Pedler and myself on the morning of Thursday, the 10th April. We found a class of students, 4 in number, reading for the M. A. examination. In the B. A. and Intermediate class taken together there are about 120 students. The College is affiliated also in Science and in Law. The College buildings are very good, containing large airy class rooms and halls. It seemed to me that a little expenditure was necessary to place them in the condition in which such buildings should be kept. The College is an endowed institution with a good annual revenue and a large scholarship fund. Its staff normally includes three Europeans.

The library of the College is well stocked with books, and is largely used by the students.

In the department of Science the stress is laid on Chemistry, and in this connection efforts have been made to provide an efficient equipment. Mr. Nag, the Professor of Physics and Chemistry, is energetically pushing on the completion of what will be really an excellent chemical laboratory, better than many to be found in the colleges of larger cities.

The College gave us the impression of being energetically managed by the Principal and his staff. I could see, however, what I have generally observed in all similar cases that it is exceedingly difficult for such a staff to

bring the Managing Committee up to the standard of their more enlightened ideas as to the requirements of a college affiliated to a University. One feature of this College is the large provision made for the accommodation of resident students. A number of separate small bungalows in the compound opposite the College constitute the College Boarding House. Each of these contains a limited number of students, and probably thus sub-divided the work of supervision is made easier.

The Caste Boarding House behind the College is, we were glad to note, to be under the supervision of the Principal of the College, who is taking measures to provide what did not formerly exist, *viz.*, proper superintendence of the borders.

In addition to these hostels, more or less specially attached to the College, we visited two others maintained for the benefit of special castes. One of these was the Vaish Boarding House, of which Mr. Baijnath is the Secretary. This is a pleasantly-situated and well-cared-for residence in which Mr. Baijnath has succeeded in keeping his community interested. The other was a beautifully-situated residence for a particular class of Brahmans, the students who reside in it being under the superintendence of a retired official, Mr. Bonar. The Raja, who founded the hostel, has reserved for his own use certain rooms in the main building, in which the Superintendent has his quarters. This hostel occupies one of the finest sites in Agra, and must be a great boon to many students of this particular caste.

The idea of the importance of such hostels has been more fully developed in Agra than perhaps in any other general educational centre that we have visited.

It might be noted that here also the "athletic" idea has taken very deep root.

D. MACKICHAN.

2. ST. PETER'S COLLEGE.

This institution which is only a second grade college, teaching up to the Intermediate or First Arts Examination, was visited on April 10th, 1902, by a deputation of the Indian Universities Commission consisting of Dr. Mackichan and Mr. Pedler.

Only four students appeared to be in the second year or Intermediate class and only one in the first year class.

The college is attached to a high school and the whole of the college arrangements appeared to consist of one room divided into two parts by a low partition wall. The room was dark, the walls, etc., were dirty and the furniture was exceedingly poor and altogether the arrangements were most depressing. Only two of the staff, educated in Calcutta, were present.

The place has no pretensions to be called a college at all, and should never have been affiliated to any University, though it is actually affiliated to Calcutta and Allahabad up to the F.A. Standard. Hostels are said to exist, but they were not inspected. With one student in the first year class a "college" hostel is scarcely needed.

The 15th April 1902.

A. PEDLER.

3. ST. JOHN'S COLLEGE.*

A deputation of the Indian Universities Commission visited the St. John's College, Agra, on April 10th, 1902. The deputation consisting of Dr. Mackichan and Mr. Pedler were shown over by the Reverend Mr. Haythornthwaite, the Principal. Mr. Haythornthwaite first made a statement, which was not taken down in evidence, in which he reiterated some of the statements he had made in his evidence given at Allahabad on the subject of the improper nature of the arrangements of the B. A. Examination. He appeared to substantiate the cases he had brought forward and to give other definite instances of students having seen certain of the questions to be set before the commencement of the

* Affiliated both to the Allahabad and Calcutta Universities up to the M. A. Standard.

examinations. He was advised and requested to submit any such statements and the evidence on which they are based to the Syndicate of the Allahabad University.

The College was afterwards inspected. The class rooms are fair, and the central hall of the building is good, but one curious feature in it is the prominent position given to the names of students who had been winners in various items of athletic competition and which are indeed more prominent than the scholastic successes. The library of the College is not large.

The Science buildings and arrangements were carefully inspected in view of the evidence which had been given before the Commission. The rooms allotted to the chemical teaching were found to be very poor, and the arrangements for both lectures and any possible practical work by the students were also poor. The supply of apparatus was rather small, and some of it did not appear to be of the nature required for good practical teaching. In the opinion of the undersigned, the arrangements were scarcely sufficient for the affiliation of the College in Chemistry up to the B. Sc. standard, though Mr. Hill, of the Muir College, had considered them sufficient on his inspection. The state of the College as regards the teaching of Physical Science was also unsatisfactory, and neither buildings, apparatus, nor arrangements were at all sufficient for teaching the B. Sc. course in Physics practically to the students, or efficiently even in the way of experimental lectures. Dr. Mackichan and the undersigned agreed in this view. Certain hostels are attached to the College, and these are fairly good though probably not sufficient for all the students to reside in.

A swimming bath is attached to the hostel.

As regards staff, there was little opportunity for any judgment to be formed, as only one or two were seen. The Indian graduate who acts both as Professor of Physics and Chemistry did not create a very favourable impression on the deputation. He seemed to be a weak man, and probably not good at practical work.

The 15th April 1902.

A. PEDLER.

ALIGARH.

MUHAMMADAN ANGLO-ORIENTAL COLLEGE.

Along with Mr. Pedler, I visited the Aligarh Muhammadan Anglo-Oriental College on Friday, the 11th April. We spent a whole afternoon in inspecting the various college buildings, and in the evening we dined in the hall with the College staff and 350 students including the pupils of the school department. This College presents a number of features that are quite unique. Of the religious features of the College we are not called upon to speak. It is sufficient to note that all the Muhammadan students are taught Muhammadan Theology according to their sect, and that this is accomplished without in any way intensifying the rivalry that exists between the Sunnis and the Shiabs. We learned, indeed, that the religious tone of the College is too liberal for the stricter classes of Muhammadans who have at various times shown opposition to the religious teaching of the Aligarh School.

What concerned us chiefly was the provision made for the residence and oversight of the students. The College aims at reproducing in India the collegiate life of Oxford and Cambridge. The students, with few exceptions, being Muhammadans, it has been found possible to reproduce this type of student-life, as it is not possible in colleges attended by representatives of different races and different faiths. The late Sir Syed Ahmad, the leader of the movement, sought to adhere to the English ideal, and the Nawab Mohsin-ul-Mulk, the present Secretary, whom we met at Aligarh, is following the example of the founder with remarkable enthusiasm.

The College buildings are arranged in great quadrangles, around which are ranged the students' rooms. These are large and comfortable and so placed that the students are completely under the control of the proctors, gate rules being very strictly enforced. The students are quite isolated from the town,

which is at least a mile distant, and can enter the town only with permits from the College authorities. The students are drawn from all parts of India, and a few come from regions so far distant as Africa. Occasionally students not accustomed to such strict supervision transgress the College laws, and on the afternoon of our visit a young Muhammadan from Bombay, whose father I happen to know, had just been brought in from Meerut. I mention this to illustrate the extent of the control exercised by the College.

Another feature of the College of quite as great importance is the relation in which the students stand to their European professors. The late Mr. Beck, whose name will always be indented with this College, devoted himself most strenuously to the carrying out of this ideal, and his successors and colleagues have maintained this tradition. The professors are brought into close contact with the lives of their students, and one can see the results of this contact in the bearing of the young men on the College playground, in the dining hall, and in ordinary social intercourse. The gentlemanly demeanour of the students was quite noticeable. To some extent it might be traced to the fact that many of the students have enjoyed a good upbringing at home; but it is also due to the special advantages which they enjoy under the collegiate system which prevails at Aligarh.

We noted that the studies of the young men were mainly confined to the literary side of the Arts course. The instructional side of the work seemed to me to have received less attention than the collegiate side so far as variety in the course of study is concerned.

We noted the general superiority of the students so far as their understanding of English and the purity of their accent in speaking English were concerned.

The College Union, to which great attention is paid, is an excellent feature in the academical life of the students. It has its own separate building, and this forms an important centre for mutual intercourse amongst the young men.

Of the prowess of the Aligarh students on the athletic field, it is unnecessary to speak. Their fame is all over India.

D. MACKICHAN.

LAHORE.

I. GOVERNMENT COLLEGE.

The Government College, Lahore, was inspected by the members of the Indian Universities Commission, on the morning of April 14th, 1902. The College occupies a very good site in a rather elevated position, and has a good deal of ground round it. The building is a handsome one, in Gothic style, with a large clock tower. It is partly occupied on the upper floor by the Oriental College Classes, and the arrangement is probably an inconvenient one for the college itself. The staff consists of four European Professors and four or five Indian Professors, and, in addition, the oriental language subjects are taught by the Professors of the Oriental College. The general class rooms are fairly good, and the library also is good, and there is a printed catalogue of the books in it. The building has also a large examination hall.

The rooms allotted for the physical science work of the college are in the upper floor of the building, and are not at all well adapted for the purpose. The lecture room is a poor one, and the rooms for the practical work of the students are very poor and badly equipped. The tables, arrangements, etc., do not appear to have been made or supervised by one who has had much experience in practical work in physical science.

The collection of physical science apparatus was fairly large, but most of it was of the nature required for lecture demonstration and popular lectures only. For instance a considerable supply of magic lanterns, etc., 5 or 6 at least, were in the almirahs, and there was comparatively little apparatus for the students' use.

In the case of Chemistry the instruction is provided in a separate building designed for the work, but here again there are evidences that the design

and the carrying out of it are not the work of one who has much real practical knowledge of the subject or much practical experience in teaching. There were several obvious inconvenient or improper arrangements which could have been altered and improved with little or no trouble and little or no expense. Provision is now being made for the teaching of Biology. A set of compound microscopes, some dissecting instruments and a collection of models have been procured, and a graduate in Biology of the Bombay University has been appointed to teach this subject. Considering the state of Biological teaching in Bombay, it is doubtful whether this will be a success. In any case it is desirable to commence with simple microscopes and to induce the students to actually dissect specimens for themselves rather than suggest that the subject can be learnt by a study of models. Types which cannot be procured locally should be avoided.

The teaching of gymnastics is provided for in an old Chapel, which is in rather bad repair.

In connection with the college work, the tutorial system is being started. There are also such arrangements as a Debating Society, Union Club, etc., and the Principal, in consultation with the Principal of the other Colleges in Lahore, has introduced a set of Inter-Collegiate Rules.

Altogether in such respects the College shows that it is a living and progressive institution, and it is clear that the Principal is doing very good work. The College is provided with an excellent hostel system and the students' rooms were clean and the hostel well arranged, and it also appeared to be well managed.

For further information regarding this College the printed memorandum by the Principal, Mr. S. Robson, Punjab Government Press, 16th April 1902, may be consulted.*

A. PEDLER.

The 17th April 1902.

2. ORIENTAL COLLEGE.

The Oriental College, Lahore, was inspected by the members of the Indian Universities Commission on the morning of April 14th, 1902.

The work of the college and attached school is carried on in the upper floor of the Government College building, but neither the college or school has many students.

The college has a European Principal (Dr. Stratton), and about 15 professors, and the school has possibly an additional 7 masters, but so far as could be understood, the masters take part in the work both of school and college. There was little opportunity of judging of the value of this institution and from the evidence received, which was very conflicting, it would appear that the institution is considered an expensive one and the results scarcely commensurate with the expenditure.

Part of the work of the staff appears to consist in the development of the vernacular literature by translating and editing books, but here again the evidence, as to the amount of work done, is conflicting.

The 18th April 1902.

A. PEDLER.

3. MEDICAL COLLEGE.

Visited by the Commission on the 15th April.

The college compares fairly well with the other Medical Colleges. In many respects it appears old-fashioned. The lecture rooms are not very satisfactory.

The practical chemistry is carried on in the dissecting room which is temporarily fitted up for the purpose during the summer months. This room forms an excellent dissecting room second only to that in Calcutta. The Physiological laboratory contains all the necessary apparatus and is better fitted in

* See also Punjab Records, Part II, pages 41-45.

this respect than any other college visited. There is a very small but satisfactory Pathological laboratory. One is struck here as in other places with the desirability of providing for the course in pure Science elsewhere than in the Medical College, and admitting students to the latter only when they are ready to commence actual medical study. There is a fair library which is said to be well used but the grant for its maintenance is small. A hostel is a great desideratum.

A. G. BOURNE.

4. CENTRAL TRAINING COLLEGE.

The Central Training College, Lahore, was visited by the members of the Indian Universities Commission on the morning of April 16th, 1902.

The building is a good one externally, but internally the class rooms appeared to be rather dark and, in some cases, they were not very well ventilated.

The Training College trains at least 3 classes of teacher graduates, and one class of graduates on the English side and also vernacular teachers. Attached to the Training College is the usual Practising School with its departments from the primary stage upwards.

The general supervision is in the hands of the Principal (Mr. Knowlton), and the school has also an English Head Master.

The arrangements for training the teachers were good, and the training in the teaching of science was made a special feature, and this appeared to be well done.

Much attention is paid to object lesson teaching, and some of the models for such teaching, which had been prepared locally, were extremely good and at the same time very cheap. The teaching of Geography by models is also well done. Comparing this college with the similar institutions at Madras and Allahabad, in the opinion of the undersigned, Madras is the best, the Punjab stands second and Allahabad is the third on the list.

The 18th April 1902.

A. PEDLER.

5. DAYANAND ANGLO-VEDIC COLLEGE.

We visited the Dayanand Anglo-Vedic College at Lahore on the 16th of April 1902.

The institution is connected with a school. The accommodation for the college classes is somewhat insufficient; but additional buildings will, we are told, soon be erected, a part of the endowed funds having been set apart for the purpose.

The physical and chemical laboratory, though perhaps sufficient for lecture purposes, does not appear to be adequately equipped for practical work by students.

The College has a good Sanskrit library.

The teaching staff appears to be full and fairly adequate. The College is affiliated to the Punjab University up to the M. A. standard.

There are a hostel, a place of worship, and a play-ground attached to the institution.

The object of the institution is to impart secular education at low fees varying with the means of the students or their guardians, to encourage the study of Sanskrit and Hindi, and to give Hindu religious education according to the tenets of the Arya Samaj.

The institution is supported by fees and the income of a large fund raised by public subscriptions, and is under the control of a managing committee composed of some leading members of the Hindu community.

GOOROO DASS BANERJEE.

6. ISLAMIA COLLEGE.

This College appears to have grown out of a movement to provide secular combined with religious education for Muhammadan youths. It began as a school teaching up to the Upper Primary standard, but in 1888, when it had attained a roll-call of 373 boys, it was raised to the middle grade. The years 1889 and 1890 saw the addition of the 4th and 5th or High School classes with a roll-call of 394 and 441 respectively for the two years. As the numbers and income increased, college classes sprang up, the first year class in 1892 followed by the second year class in the following year, when the number of scholars on the books had risen to 802. The two Science classes, however, were not organised till 1900. The roll-call of the institution, as a whole, on the last day of March 1902 stood at 1,261.

The College has thus grown out of the school with which it is still in a manner associated. The staff consists of eight professors and assistant professors (all Muhammadans) drawing pay that ranges from Rs. 150 to Rs. 33 per mensem. The number of scholars in the College Department is 70 this year against 79 in 1901 and 70 in 1900. The average number of passes per annum in the F. A. Examination, taking the results of the last three years, is 16.

A scale of fees varying according to the means of the parents and guardians from Rs. 6 to Rs. 4 in the B. A. classes and from Rs. 5 to Rs. 3 in the F. A. classes is charged. The very poor receive gratuitous education, and are also helped in other ways.

The total income from fees for the year 1901 was Rs. 8,349 and the expenditure Rs. 16,734, the excess expenditure being met from subscriptions and donations.

The governing body of the College, which consists mostly of Muhammadan gentlemen in the public service, has founded several other institutions in connection with the central movement. There is thus an Orphanage and an Oriental School within the precincts of the College, and five branch schools for boys and nine for girls outside in different parts of the town.

There are two boarding houses with 52 inmates in all. The rooms reserved for the orphans are very badly ventilated and quite unfit for residence. The other rooms, which are open to the students of the school and college on payment, though somewhat superior to these, but leave much to be desired in the way of ventilation and cleanliness. In fact, there is a general air of squalor about the place and a want of fitness in the arrangements. The building, which was the family residence of a Hindu gentleman before it was purchased by the Society, is quite unsuited for the use to which it has been put.

My impression of the Islamia College, on the whole, is that it wants a European Principal, a better equipped laboratory, and a more competent teacher of Science than it has now. Above all, it ought to be removed to a better and more open position and provided with a suitable building. Its promoters are earnest men with a strong purpose, and have no thought of personal benefit in any form.

SYED HOSSAIN BILGRAMI.

This College, which, as the name indicates, is a Muhammadan institution was visited by the Commission on the morning of the 17th April. It grew out of a High School maintained by the Muhammadan community with the aid of subscriptions drawn in many cases from people of moderate means. The amount of interest which it has aroused in the Muhammadan community may be judged from the fact that without any extraneous aid this College has already reached the standard of the B. A. Examination, and has added the class rooms and some of the teaching apparatus required for such a course.

The buildings are poor and ill-suited for the work to which the Islamia Society is aspiring. I do not think that some of the most important ends of University education are attainable in the surroundings amid which the students of the Islamia College received their instruction. A proper building is one of the imperative needs both of the school and the college. The attempt to teach science in this College is of a very feeble kind. It is true the Principal treated us to a chemical salute, and attempted to impress us by some elementary experiments rather clumsily performed, but the effect was to show that the physical and chemical instruction imparted to the students must be of the most inadequate description.

The outstanding feature of this College, in which instruction in the Muhammadan religion is made an indispensable part of the curriculum, is undoubtedly the enormous strength of Muhammadan enterprise that underlies it. While the College must be pronounced to be most unsatisfactory from an educational point of view, the fact of its growth must be reckoned with. It raises the question whether such sectional movements should be allowed to go on unaided and undirected by Government or the University. Such institutions should be raised to a higher standard and the forces which lie behind them utilised in the solution of the problem of higher education in the Punjab. No College that I have visited illustrates so clearly the significance of the sectional or sectarian element in the educational problem in India. Under any adequate system of affiliation, there could be no place for such a college as it now stands; but the enthusiasm which lies behind the effort is worthy of high praise.

D. MACKICHAN.

7. FORMAN CHRISTIAN COLLEGE.

The Commission visited this College on the morning of the 17th April. The college hall and class rooms were inspected, and the laboratories for physical, chemical and biological work. The College has a roll of 360 under-graduates, of whom only the first and third years' students were present, the second and fourth years' classes having been dismissed for the University Examinations. The class rooms seemed well adapted for the work of a large college, although the rapid growth of the College would seem to require an expansion of the college buildings. The stock of physical apparatus was fully adequate for the purposes of the B. A. Science courses. The same holds good of the chemical section. In Biology the College is affiliated up to the standard of the first B. Sc. Examination, and the beginnings of a biological laboratory have been provided—sufficient meanwhile for this elementary work.

The College has a very complete staff including five professors connected with the Presbyterian Church of America. It is a college of long standing, and in recent years it has rapidly expanded. It now occupies a strong position in point of staff and attendance.

The boarding house at present maintained by the College was not inspected, as it is about to give place to a very large and well arranged students' residence, the plans of which were shewn to the Commission. This residence, the foundations of which were to be started on the day of our visit, will have accommodation for 150 students.

Students from various parts of the Punjab and most of the Christian students of the province are attracted to this College, which, along with the Government College in Lahore, has done much to raise the general standard of education in the University.

D. MACKICHAN.

8. LAW SCHOOL.

We visited the Law School of Lahore on the 18th of April 1902.

It is located in a hired house, but the accommodation is neither comfortable nor quite sufficient.

The teaching staff appears to be full and adequate. But the library attached to the institution is a poor one, and there is not, we are told, any other law library in the city to which students can have access.

There is a Vernacular Department of the school for the training of lower grades of legal practitioners.

Lectures are delivered in the morning and in the evening.

The management of the institution is vested in a Committee composed of the Vice-Chancellor and certain members of the Senate, and is subject to the general control of the Punjab University.

Of late there has been some falling-off in the number of law students.

GOOROO DASS BANERJEE.



INDIAN UNIVERSITIES COMMISSION.

REPORTS PRESENTED

BY COLLEGES

ON

DISCIPLINE, MORAL TRAINING, etc.



SIMLA :

PRINTED AT THE GOVERNMENT CENTRAL PRINTING OFFICE.

1902.



सत्यमेव जयते

NOTE.

At the instance of the Hon'ble Syed Hossein Bilgrami certain selected colleges were asked to supply information regarding discipline, moral training, etc.

The replies received from the colleges are contained in this volume.

R. NATHAN,
Secretary, Indian Universities Commission.





सत्यमेव जयते

CONTENTS.

Page.

	I.—Heads of the information which selected colleges ^{are} asked to supply.	
	II.—Replies of the colleges :—	
	<i>Madras.</i>	
1	Presidency College	1
2	Christian College	6
3	Pachaiyappa's College	9
4	Bangalore Central College	13
5	Nizam's College, Hyderabad, Deccan	18
6	Kumbakonam College	22
7	Maharaja's College, Mysore	24
8	Maharaja's College, Trivandrum	29
	<i>Bombay.</i>	
9	Elphinstone College	36
10	Wilson College	38
11	Grant Medical College	41
12	St. Xavier's College	42
13	Baroda College	44
	<i>Calcutta.</i>	
14	Presidency College	48
15	St. Xavier's College	53
16	Ripon College	56
17	City College	57
18	Calcutta Madrassa	59
19	Hughli College	60
20	Dacca College	62
21	Rajshahi College	68
22	Patna College	70
23	Brajamohan College, Barisal	72
24	Raj Chandra College, Barisal	77



सत्यमेव जयते

HEADS OF INFORMATION.

(1.) DISCIPLINE.

1. What measures are adopted in your college to test the quantity and quality of work done in the junior F.A. and junior B.A. classes?
2. Are monthly or terminal or any other periodic examinations held?
3. How do you deal with students who are found to have persistently shirked their work during the first or the third year of their college course?
4. What penalty, if any, is attached to absence from class without leave? What percentage of absence from class-work or lectures excludes an undergraduate from either the F.A. or the B.A. examination?
5. Is an undergraduate thus excluded from an examination permitted to appear as a "private candidate"?
6. How is want of punctuality in daily attendance dealt with?
7. Is much home work given out to undergraduates, and how is their punctual and conscientious performance enforced?
8. What fees are charged in your college? Is the charge uniform for all the four years or is the scale graduated? Is an extra fee charged for laboratory work? How are defaulters dealt with? Do graduates in the pass degree pay any fees when preparing for higher examination? Do they attend regular lectures or laboratory work, &c.?
9. What measures, if any, are taken to enforce good manners?
How is cleanliness encouraged?
10. What steps are habitually taken to foster a habit of truthfulness in students? How is the contrary habit dealt with?
11. Do you find that the discipline maintained in your college has led to the development of a code of honour among students? How is a student who is found guilty of a breach of the code treated by his fellow-students?
12. What are the recognized punishable offences in your college? What are the punishments inflicted? Is imposition resorted to, or fines? What form does either method take?
13. To what extent are cribs, keys, abstracts and other aides-memoire used or relied on by the undergraduates, and mostly in what subjects of study or examination?
14. What steps, if any, are taken to ensure that undergraduates and examinees do not rely entirely on these aids, and neglect the study of the text books which they are supposed to elucidate, or reproduce in compressed, mnemonic forms?

(2.) HOSTELS AND HEALTH.

1. Where do the undergraduates of your college live? Are any hostels provided for them?
2. What supervision is exercised over hostels? Is the supervision European or Native? In case of there being a European or Native supervising official, is he a whole-time man, or only one of the teachers taking this as extra work out of college hours? How many inmates of hostels fall under the control of a single supervising official? By what class of people are the houses surrounding your hostel or hostels occupied?

3. What is the nature of the supervision exercised? What control has the supervising official over—

- (a) the food provided for the students,
- (b) physical exercise and recreation,
- (c) moral conduct?

4. What are the qualifications of the supervising official?

5. What out-door games are favoured in your college or in the hostel or hostels attached to your college? Are any games compulsory? Are Sandow's or any other athletic exercises gone through habitually by them? If so, under what supervision?

6. How is the health of your students cared for in the college or in the hostel or hostels? What is done in case of sudden illness, or the outbreak of epidemics?

7. Is vaccination encouraged? How?

8. What care is bestowed on the preservation and protection of the eyesight of your scholars? Are the writing desks used in your institution constructed on hygienic principles? Is the arrangement of light or ventilation in your college or hostels controlled by similar consideration? Do you use benches with or without backs?

9. What is done in the case of students who betray a consumptive tendency without being aware of it? Are they allowed to be weeded out in course of natural selection, or is anything done by the college authorities to direct the attention of parents or guardians to the tendency, or any other active measure taken to avert it?

(3.) INFLUENCE.

1. What is the average number of scholars in each class? What is the average number of pupils to each lecturer? What individual attention does each scholar get from his teachers? What is the maximum number to each lecturer or to any lecturer?

2. Does the average student do any private reading outside his text books? How is he guided in his choice of books?

3. Have the scholars access to their teachers out of school hours? Has each or any Professor a room in the college where he can receive and talk to pupils privately?

4. What other opportunities are given to pupils and teachers to come together?

5. Have you any hostel or hostels provided for your scholars? If you have, do you or any of the Professors ever visit the hostel and attempt to influence the resident students and help or guide them in their studies?

6. Is there any interchange of thought and influence between colleges distantly situated? Do you not think it desirable that there should be such interchange between Professors and teachers engaged in carrying out the same work at different centres? What steps can be taken to bring about such interchange?

7. Would you recommend that towards this end a council should be formed by inviting one Professor from each affiliated college to meet and confer together once, if possible oftener than once a year, to discuss inter-collegiate matters? Might not this body be also utilised for the selection and nomination of examiners?

8. What other method or methods can you suggest of securing interchange of thought between distantly situated colleges with the view of unifying and widening the influence of the University?

(4.) MATRICULATION.

Would you support the suggestion that the present Matriculation examination, in which, from the huge proportions it has assumed, it is practically impossible to secure uniformity of standard, should be abolished, and each affiliated college be allowed to matriculate for itself as is the custom in the older English Universities, each candidate thus selected paying a fee, say of Rs. 10, to the University for the privilege of having his name entered in the list of undergraduates entitled to appear for the higher examinations of the University after attending the prescribed course of collegiate lectures? The latitude thus allowed to affiliated colleges might be hedged in, if necessary, by defining more stringently than hitherto the qualifications required for admission, and for the rest leaving things to find their own level in course of time.

What would you say to an alternative proposal like the following? :—That the Matriculation Examination should be confined to those who really wish to take up a University course. This might be secured by stopping the publication of a Pass List in the Gazette and issuing no certificates, a Departmental School Final Examination with a wider and more practical scope taking the place of the present Matriculation for purposes of public service. It has also been suggested in this connection that candidates for Matriculation should be examined only in the three following subjects, namely, (1) English, (2) a Second Language, (3) Arithmetic, and that the minimum pass marks should be raised in all three.





सत्यमेव जयते

II. MADRAS.

1. PRESIDENCY COLLEGE, MADRAS.

(1) DISCIPLINE.

1. A College Examination is held at the end of the first and third years at which the students are examined in all the subjects which they have studied during those years

Papers are set from time to time during the course of the year by the individual teachers.

2. Except the examination at the end of the year, there is no periodical examination.

3. They are not allowed promotion into the higher class, and the certificate of progress required by the University is withheld. This means that they have to go through the year's course again.

4. The regulations of the University as regards attendance are stringent and are observed. They require that each student should attend for at least $\frac{3}{4}$ of the number of working days of the term; and that the minimum number of working days for the year should be 150 for each class.

Absence without leave, except in unavoidable circumstances, is punished by counting each day's absence as two for the purposes of the University.

5. If the Syndicate think that the certificate has been improperly refused, they may admit the candidate to the examination; but not otherwise.

6. By treating late attendance as half a day's absence if notice is taken of it by the Professor or Teacher.

7. In Mathematical subjects a considerable amount of work is expected to be done at home by the students, which is revised by the Professor and Assistant Professors. In the second language division the translation work is done partly at home. In other subjects the need of written home work is not much felt, but preparation of the subject for lecture is expected.

Each teacher has his own method of ensuring the performance of work set; exposure of a student's ignorance in class is perhaps, as effective as any.

8. The scale of fees is fixed by Government and at present it is as follows :—

Per Term.	If paid.	
	In advance. Rs.	In instalments.
F. A. course	36	38
B. A. course—		
Whole course	50	52
English language only	18	...
Second language only	9	...
Science division only—		...
Mathematics, Philosophy or History only	30	...
Chemistry, Physics or Natural Science	35	...
M. A. course	30	...

No extra fee is levied for laboratory work, but it will be seen from the above rates that a student, who is reading for the science division alone, pays Rs. 5 more per term in those subjects where laboratory work is required than in the others.

For late payment of fees a fine is imposed up to ten days, at the end of which time if the fees and fines are not paid the student's name is struck off the rolls. In practice the necessity of resorting to this measure scarcely ever occurs.

The degrees in the Madras University are not divided into 'pass' and 'honours'.

Graduates, who are reading for the M.A. degree, pay fees on a regular scale mentioned above. They do not attend regular lectures, but their work is directed by the Professor, for whom in some departments they act as lecture assistants.

9. No difficulty is met with in enforcing good manners. The following rules prescribed in the Madras Educational Rules are observed :—

- (a) Every pupil shall wear a clean and decent dress, and, in all cases where good manners require it, a suitable covering for the head. [The latter clause applies to almost all classes, except Europeans, Eurasians, Native Christians and females.]
- (b) No pupil shall be allowed to sit in the class with his shoes on, unless they are shoes of English pattern and unless socks and trousers are also worn.
- (c) Every pupil shall salute the teachers on the occasion of his first meeting them for the day within the school precincts.
- (d) On the teacher entering his class room the pupils shall rise and remain standing till they are desired to sit or till the teacher takes his seat.
- (e) No pupil shall be allowed to leave the class-room without the permission of his teacher, or until the class is dismissed.

No measures are required to encourage cleanliness, as the students are drawn from classes which are by custom and training disposed to personal cleanliness.

10. No formal measures are taken to foster a habit of truthfulness. Cases of petty lying would be met with an admonishment by the Principal or Professor, and more serious cases would be regarded as punishable offences.

11. There are signs that a public feeling among students on matters affecting the honour of the College is developing, but it is still rudimentary.

12. There is no formal list of punishable offences. Late attendance, absence without leave and breaches of discipline are punishable; and in general any conduct considered unworthy of a student pursuing a liberal education would be punished. The principal punishments inflicted are fines, suspension, loss of term certificate and dismissal. Impositions are resorted to by one member of the staff on rare occasions.

Offences that cannot be met by a sharp rebuke from the Principal or Professor are not common, and serious offences are extremely rare.

13 In the F.A. classes in English some students are found to use editions of textbooks annotated locally, which in addition to their legitimate function of explaining difficulties which the student cannot be expected to master without assistance, also paraphrase very considerable portions of the text and leave nothing for the student to do but exercise his memory. The use of such editions is discountenanced by the Professor. Beyond this I do not think that cribs, etc., are much used in this college. In Mathematics I have never met with a case of a student working questions from a key.

14. The difficulty is not encountered.

(2) HOSTELS AND HEALTH.

1. The following table shows how the undergraduates live :—

226 students residing with parents or guardians.

5 " " in hotels.

22 " " in lodgings.

103 " " in houses rented by themselves or in conjunction
 with other students.

62 " " in a hostel.

The Victoria Hostel is in close proximity to the College and is designed for students of this and other colleges. At present it is capable of accommodating about 110 students, but it will before long be increased.

2. The Victoria Hostel is under the control of a Board of Governors, of whom the Principal of this College is an *ex-officio* member. The executive control is in the hands of the warden, who practically governs the whole internal economy of the hostel.

The hostel has only been in existence for three years and the wardens appointed have been Europeans, the first being a Professor (and Acting Principal) of this College, and the present warden being a Professor at the College of Engineering.

There is no emolument attached to the post, but the warden has a house assigned to him near the Hostel. The warden is assisted by a deputy warden. The latter post is honorary and has been filled up to the present by a native gentleman on the staff of this college.

Under the orders of the warden the executive work of the hostel is carried on by the manager, a native and a whole-time man, who lives in the hostel.

The buildings are situated in an open park and have no houses near them, except the quarters of some of the instructors and the military students of the College of Engineering.

3. & 4. The manager has general control over the residents in the hostel, but questions of discipline and complaint are referred to the warden—

(a) The food for the Hindu residents is supplied by a contractor; it is taken charge of, and handed over to, the cooks by the manager, who, if he does not approve of the quality, lays it before the deputy warden, a Brahmin. The deputy warden has the power to reject supplies of inferior quality, and has generally supervision over all arrangements regarding food.

(b) In the hostel the warden supervises the games, etc., as far as possible; but as the recreation grounds of the Presidency and Engineering Colleges for the students of which the hostel is chiefly intended are in close proximity to the hostel, no great developments have been attempted in this direction.

(c) Frequent inspections and visits by the warden and manager are relied upon.

5. Cricket, foot-ball and lawn tennis are the games recognised by the college and are vigorously played throughout the year. Each game has its own club which is managed by a committee of students under the presidency of a member of the professorial staff; and the three clubs are amalgamated into an Athletic Association.

No games are compulsory. Gymnastics and drill are compulsory on those students who do not regularly play one of the recognized games. The athletic exercises are supervised by a trained instructor in gymnastics. Sandow's exercises are used by a few students in their own rooms. No supervision is exercised.

6. There is no special medical supervision over the health of the college. In the case of sudden illness occurring to a student while in the college building, the nearest practitioner would be called in.

So far the college has not, to my knowledge, been visited by any serious epidemic.

In the hostel no special arrangements are made, but due attention is paid to ventilation and cleanliness. In cases of illness the members are looked after by their own medical attendants and every possible assistance is afforded by the staff.

At the opening of the hostel a room was set apart for such cases, and it is proposed to erect a detached bungalow for this purpose when the extensions are made to the existing buildings. There has up to the present been no outbreak of epidemic with the exception of one case of typhoid fever; the patient in this case was removed from the building and the matter reported to the Health Officer for purposes of disinfection.

7. Vaccination is universal among students, and no steps are necessary to encourage it.

8. The lecture rooms in this college are all airy and well ventilated. Most of them open on to the sea face and get the advantage of the sea breeze. They are well lighted and the light in most cases comes from the left of the student as he sits at his desk.

Benches with backs are invariably used.

9. Such cases are not known to have occurred.

(3) INFLUENCE

1. The subjects taught in the college are so varied and the strengths of the classes in various subjects are so different that no useful information could be derived from an average. The Professor and Junior Professor of English, for example, deal with B.A. English classes, 150 strong, while the Arabic munshi and the Latin master have classes of only two or three students.

It is impossible to state in hours and minutes how much individual attention each student receives from his teacher. In those subjects in which laboratory work is required each student works under the immediate supervision of the Professor or his assistant.

In other science subjects (Mathematics, Mental and Moral Science and History) and in the language subjects the teacher tests the progress of individual students by questions, in class, by supervision of examples worked at home in mathematics and translations in the vernaculars and by compositions in English.

2. The best students do extensive reading outside the text-books. In this they are guided by their Professor's recommendation. In English most of the students do a little in the way of private reading.

There are three students' associations in the college which tend to encourage private reading among the average student. These are the Literary Society and the Historical and Philosophical Associations which meet at frequent intervals, generally under the chairmanship of a member of the professorial staff of this or one of the other colleges in Madras, to hear a paper read by one of their own members or to engage in a debate. The preparation of these papers involves a considerable amount of private reading. There are also similar associations which tend to encourage private study in the Tamil, Telugu and Malayalam vernaculars.

3. The Professors and Assistant Professors are readily accessible to students out of lecture hours in the college.

Those Professors who have laboratories have a small portion screened off for use as a private room. Of the others the Senior Professor can generally find a room available for private use, but the rest have none.

The want of private rooms is much felt.

4. Social gatherings managed by the students are sometimes held at which they meet the staff.

Members of the staff frequently meet the students in connection with the affairs of the various clubs and literary associations.

5. The Victoria Hostel has been mentioned above. As it has been under the direct charge of a member of the professorial staff, there has been no occasion for the other Professors to visit it.

Informal social gatherings have been held from time to time at the hostel either by the warden or by the resident students to which the members of the staff have been invited; and informal lectures and demonstrations on subjects not forming part of the college course have been delivered by one or two Professors to the resident students.

6. Beyond chance meetings at the same hill station in the vacation and at the University Senate, there is not much contact between the Professors in Madras and those in the mofussil.

The various first grade colleges affiliated to the Madras University are under such widely different management and have such different aims that combined action is difficult to compass.

The three Government Colleges (the Presidency, Kumbakonam and Rajahmundry Colleges) are more or less in touch with one another, as most of the staff in the two smaller institutions have at one time or other been on the staff of this college.

Most of the other first grade colleges are hampered with High School departments—a circumstance which influences their attitude on many points.

7. Unless the council were given a distinct status in the University, it is doubtful whether it could do any good. Even if it were made a part of the University machinery, there are several causes which would operate against it.

In the first place, it would be too large. Taking first grade colleges alone, there are fifteen affiliated in Arts, two in Law, two in Teaching and one each in Medicine and Engineering. Allowing one representative to each this would mean twenty-one members. On this scale the larger and more important colleges, such as the Madras Christian, Central Bangalore, Presidency Madras Law and Engineering Colleges would be under-represented, and if proportional representation were adopted, the number of members would be over thirty—a number which is much too large for the conduct of the business the council would be called upon to transact.

Again, some of the colleges are at such a distance from Madras that even if meetings of the council were held only once a year, it is not likely that their representatives could attend. The members for the Trivandrum Colleges, for example, would have a four days' journey by road and rail to Madras and the Mangalore representative a journey of equal or greater length.

The last duty which such a council would be suited to perform would be the nomination of examiners, as it would be composed for the greater part of persons from whom the examiners are usually selected, and to put the nomination of examiners into their hands would place them in a very embarrassing position.

The present arrangement of appointment by the Syndicate is much to be preferred, especially as the Syndicate have passed a self-denying ordinance on the matter.

8. It appears to me that a University, whose functions are mainly those of examining, can never hope to have much influence over the minds of students.

Considering that while six or seven thousand candidates appear yearly for the Matriculation Examination, only four or five hundred succeed in attaining to the degree, the majority of students must consider the University not so much an *alma mater* as a relentless judge. The truth seems to be that the great majority of students who attempt to enter and a large proportion of those who do enter the University are quite unfit for a liberal education. Instead of trying to extend the influence of the University, I would rather concentrate it among the few who are really fit subjects and among them make it more effective.

This might be done by reducing the proportions of the Matriculation and F. A. Examinations, abolishing the second grade colleges and some of the less important first grade colleges and concentrating the students for a degree into larger and better equipped colleges at a few chosen centres, say Madras, Bangalore, Hyderabad, Kumbakonam, Trichinopoly, Trivandrum and Rajahmundry (or Vizianagaram).

Such a scheme would only mean rejecting at the outset a larger number of students who, under the present system, are found to be rejected at the end of their college career. It is doubtful whether many of the students who at present are allowed to proceed to Matriculation and to the F. A. Examinations only to be rejected finally for the degree receive much benefit from their studies. The advantages to the remaining students would be great. They would have more individual attention from their teachers, and the lectures no longer hampered by the presence of the backward in the class could go further and deeper into their subjects; there would no longer be the uneasy feeling of working for an examination instead of for the opening of the mind and the acquisition of knowledge; there would in fact be more of the academic feeling which is such a larger part of the influence of the older English Universities.

Under such a system the college might have a large share in the University management, and a college would feel itself an integral part of the University instead of an almost negligible fraction as is now the case with most

(4) MATRICULATION.

If the second grade colleges were abolished and if the number of the first grade colleges reduced, I should be strongly in favour of allowing the colleges to matriculate for themselves. Under the present system, however, I do not consider it advisable to allow the second grade and minor first grade colleges to select candidates for a University education.

If such a drastic measure of abolition and reduction is found impracticable, I would support the alternative proposal. The Departmental School Final Examination should embrace a wider range of subjects than the present examination, *e.g.*, Drawing, Practical Geometry, Book-keeping and Commercial correspondence should find a place in it. All the subjects of course should not be compulsory.

The limitation of the subjects for the Matriculation to English, second language and arithmetic, even though the minimum for passing were raised, would, in my opinion, prevent the test being sufficiently searching. I would add to these History and Geography and Algebra and Geometry, theoretical and practical.

29th March 1902.

E. W. MIDDLEMAST,
*Acting Principal,
Presidency College, Madras.*

2. MADRAS CHRISTIAN COLLEGE.

(1) DISCIPLINE.

1. Daily *viva voce* examinations and occasional written examinations.
2. Terminal examinations are held in all classes under the direction of the college, and more frequent examinations at the option of the Professors of each subject.
3. Students of the first year who (from whatever cause) are considered unfit for the second year's course are not promoted. Students of the third year who are considered unfit for the fourth year's course have to give their fourth year to English and their second language only, and to spend a fifth year in completing their course.
4. Students absent without leave are fined. The University (and therefore of course the college) requires attendance of at least three-fourths of the working days of each session, both for the F. A. and B. A. Examinations.
5. The Syndicate has power to admit candidates thus excluded, but in point of fact never does so, unless in such very exceptional cases as those in which absence is caused by an outbreak of plague.
6. A fine is imposed.
7. Daily preparation is required and is enforced by remonstrance, fine and occasional imposition.
8. The fees are charged at what is known in this Presidency as the "Standard" rate. They are fully detailed in the College Calendar on page 57. There are no free or partially free scholars. Defaulters (who are very few) are dismissed after a short interval. No extra laboratory fee is charged. There are no lectures for students preparing for the M.A. degree, but there is laboratory work for those taking up Biology and Physics and Chemistry.
9. The Rules of Discipline on pages 60-62 of the Calendar are strictly enforced.
10. Truthfulness is constantly inculcated and offences involving untruthfulness are severely punished.

11.-The discipline and influence of the college have undoubtedly done so to some (and a gradually increasing) extent, though there is still much room for improvement.

12. Lateness of attendance, absence without leave, breach of the rules of discipline, as well as all offences of a distinctly moral kind. Fining is often resorted to, suspension from attendance and impositions sometimes but seldom. Impositions are regarded as belonging to school rather than to college discipline.

13. To a considerable extent in F. A. History, Physiology and General English.

14. Steady effort to quicken intelligence and to secure that in *visd voce* and written examinations, intelligence and not memory alone is tested.

(2) HOSTELS AND HEALTH.

1. With parents and relatives ; in houses which are taken by a number of students in common and to which they bring their own servants ; and in hired rooms, the students going to hotels for their meals. There are three hostels connected with the college. The Y.M.C.A. Hostel is situated near the college and is open to its students.

2. See Hostel Rules. In the case of all three hostels the manager of the hostel is also a member of the college or school staff. The hostels are all in close proximity to the college. The other buildings in the neighbourhood are business offices and godowns, hotels and lodging houses, and private houses occupied by well-to-do Hindu families.

It will be seen from the rules of the hostels that to a large extent the resident students are actively associated in the management. Since the initial difficulties of the first few years were overcome, this arrangement has been found to work extremely well, and to be highly beneficial to the inmates.

3. The nature of the supervision will be found defined in the Hostel Rules. Encouragement is given to due physical exercise and recreation.

4. The managers are all men of experience and character, who enjoy the confidence of the college authorities and of the parents and guardians of the students. Their position as members of the college or school staff gives them additional influence. The Superintendent, who is the supreme authority in each of the hostels, is always a Professor, commonly the Principal, of the College.

5. Cricket, tennis and foot-ball. No games are compulsory. Athletic exercises are gone through regularly by a large number of students. Sandow's exercises are not unknown. No special supervision is directed in the hostels to such exercises.

6. As shown in the rules, each of the hostels has a medical attendant, who visits them daily. Cases of infectious disease are removed to hospital.

7. No encouragement of vaccination is necessary on the part of the college authorities. It is sufficiently secured by Government regulations.

8. Everything possible is done to secure well-lighted and well-ventilated rooms, both in the college and in the hostels. In the college the writing desks are of the usual pattern, arranged in rising galleries. No benches are used in the college. In the school all benches have backs.

9. If a case of consumptive tendency came to the notice of the college authorities, they would certainly advise the student himself and his parents or guardians regarding it.

(3) INFLUENCE.

1. The Junior F.A. class numbers about 100. It is divided into two sections for mathematics. In other subjects it is taught as a whole.

The senior F.A. class numbers about 200. In the subjects of English and Physiology it is taught as a whole. It is divided into two sections for Scripture and History. It is divided into two sections for the more theoretical teaching of mathematics and into three sections for the working of problems.

The Junior B.A. class numbers about 150. It is taken as a whole for Scripture and English. In science it is divided into five sections of approximately the same size.

In the senior B.A. class the largest number taught together is about 220. This is in Scripture and English. In Science the class is divided into five sections, the largest of which numbers about 60.

As is shown in the College Calendar, pages 18 to 20, the work of the college is carried on by eleven Professors, three Assistant Professors, eight tutors and seventeen teachers of second languages. In 1901 the average number on the rolls of the college was 750. Thus, if all members of the staff be reckoned, the average number of students to each is about nineteen. If the teachers of second languages be not reckoned (a considerable portion of their time being given to the school attached to the college), the average number is about 34. The question, however, hardly admits of a precise reply. The work of the tutors is mainly that of correcting written exercises and has to be reckoned in any estimate of the individual attention given to each pupil.

If larger funds were forthcoming, the number of Professors might be, and the number of Assistant Professors certainly would be, increased; and in some subjects the classes would be more sub-divided than they are at present.

2. A great many students do. In the B.A. classes even average students make a large use of the class libraries (see College Calendar, page 97) which contain books bearing on the subjects they are engaged in studying, but not directly on the prescribed course. The general library is extensively used by students of all the classes.

3. Students have access to their teachers out of school hours. There is a room in the college where any Professor can receive and talk to students privately.

4. Professors are often invited to be present at the debates of the numerous societies for discussion which are mentioned in the college Calendar (pages 101—109) and which meet regularly throughout every session. Professors also meet students in connection with the foot-ball and other clubs enumerated in the College Calendar (pages 110—112). Students often visit Professors at their own houses. Dr. Miller has recently established a hostel near his own house on the Shevay Hills, at which in 1901 about 40 of the students spent a portion of the summer vacation. It is possible that this institution may be permanent. Once a year the Professors visit the houses of all students who are not residing with their parents or relatives in Madras.

5. There are three hostels. All the Professors occasionally visit the hostels, while it is the duty of the Superintendent of the hostels to do so constantly.

6. Not by express arrangement, but in indirect ways colleges benefit by each other's experience. Interchange of thought and influence between different colleges is undoubtedly desirable. That each first grade college should have a Calendar and exchange it for those of other colleges would do something.

7. There seems to be no objection to such a council, supposing it to be practicable; but it ought not to be utilised in the way proposed.

8. The development of inter-collegiate sports and a University magazine.

(4) MATRICULATION.

No. Even if it be granted (and it is probably far too much to grant) that things would "find their own level in course of time," that time would be so long and the chaos in the meantime would be so great, that the very idea of what real education means would disappear entirely from the public mind.

As regards the alternative proposal, it is desirable that those only should matriculate who mean to pursue a University course; but the way in which the suggested scheme would work out in practice remains rather obscure. The present state of matters might be improved if there were well arranged school leaving examinations in different centres, such that the University might accept certificates of having passed them as qualifying (either in whole or in part) for matriculation. A fee for matriculation alone might then be fitly charged by the University. All would depend, however, on the details of the school-leaving examinations and the proposed methods of conducting them. Until the Universities have an opportunity of satisfying themselves on these points, they ought to conduct matriculation examinations substantially on the present lines. So far as "uniformity of standard" is concerned, the first alternative, so far from securing it, would only accentuate the irregularity. The second alternative, if properly worked, might secure it in a measure.

MADRAS CHRISTIAN COLLEGE;

26th March 1902.

WILLIAM SKINNER,

Acting Principal.

3. PACHAIYAPPA'S COLLEGE.

(1) DISCIPLINE.

1. The main test is examination, but questions put in class are also used. It is generally expected that students shall have some knowledge, acquired through preparation, of the subject before hand. From time to time old work is gone over again and the students are questioned.

2. The examinations are terminal. In addition special papers are set upon a particular portion of a subject. These are of varying duration—one to two hours.

3. They are treated in different ways. In some cases their promotion is withheld. In others they are warned and promoted on condition of showing satisfaction in test-papers set in the following term and of showing other signs that they are working adequately. In cases where the student is a free scholar he is deprived of a portion or the whole of his scholarship either temporarily or permanently.

4. Usually a small fine. Absence from more than a fourth of the lectures or class work precludes his sitting for the F.A. or B.A. Examination.

5. No. The only chance of his being allowed to appear is that he can get "exemption" from the Syndicate from producing his term certificate. Such exemption is only recommended in cases of severe sickness.

6. A fine of one anna is imposed for lateness in attendance. It is at the discretion of the lecturer or assistant in charge of the class to refuse attendance.

7. Not much home-work is set definitely. Students are asked to be prepared with certain portions of texts, mathematics and physiology in F.A. classes and science branches in senior classes, before coming to class. Lecturers take care by questions to see that they do this. Sometimes impositions are imposed, or a student is asked to leave the class for the hour. The ordinary course is severe rebuke on the part of the lecturer.

8. The following fees are charged, F.A. classes. No difference between junior and senior :—

(a) Rs. 28 if paid in a lump sum in advance.

(b) Rs. 30 if paid in four equal instalments.

Both B.A. classes.

For the whole course—

(a) Rs. 34 if paid in lump sum in advance.

(b) Rs. 36 if paid in four equal instalments.

			If paid in advance.	If in instal- ments.
English language course only	...	...	11-8	12
Second language	...	...	5-8	6
Science, Br. (philosophy and history)	...	...	19-0	20

Fees are payable by the 15th of each month. In default a fine of two annas is imposed in the rupee. If the fees are not paid by the 25th, the defaulter's name is struck off the register until payment is made. We have no classes for M.A. students, nor have we a laboratory.

9. The rules for good manners enforced are those set down in the Madras Educational Rules. Disrespect to the teachers or Professors is dealt with by report to the Principal and an apology, at least, demanded. Such cases are, however, very rare.

This being an orthodox Hindu college, cleanliness is strictly in accordance with caste rules. There is a fountain in the middle of the court with taps for the washing of feet, etc.

10. There is no system beyond that of continual insistence upon truthful statement and severe censure when it does not occur. I find that the average student, if treated fairly and gently, does not indulge in downright lying. Some-

times subterfuge, especially over 'leaves' or excuses for late attendance occurs. In that case rebuke or refusal of leaves and non-acceptances of excuses is the ordinary course.

11. On the whole, yes. The students, as a body, look down upon dishonest work, *e.g.*, cribbing in examination. One detected by his fellows commonly finds little favour. I find that I can generally trust students whom I have asked to read a certain book or to do work in a certain way to do so. The discipline used is rather negative than positive; it depends more on the influence of a Professor's opinion or the fellow-student's opinion than upon elaborate rules. By the time that the B.A. class is reached the sense of 'business morality' becomes developed.

12. Laziness in work, slackness in attendance, cutting lectures, disrespect to lecturers, dishonesty and untruthfulness, are the chief offences. The two ordinary punishments are fines and deprivation of attendance marks. Imposition is rare. Fines are imposed for coming late to college or class. Also for failure to return library books at the appointed time and for breach of order in the library. The fine is light—one or two annas for each offence. Occasionally for worse faults expulsion is resorted to. More ordinarily students are reported to the Principal and reasoning and reproof are used.

13. Very little use is made of cribs and keys. Matriculation students make use of them in order to pass in texts. In the college department, as far as the vernacular texts go, there is no use made of them. In Telugu they have not even annotated editions, but depend entirely on the teacher for grammar, criticism and translation. For the English texts prescribed for the F.A. and B.A. there are a number of cheap editions published locally. These generally contain a number of quotations from recognized critics which the students prefer to learn by heart, and they thus reproduce conflicting opinions unintelligently relying upon their memory rather than the use of their own wits. In history there are a number of 'short guides to Indian and English History' which the lazy student tries to substitute for honest work. The result is fortunately failure as a rule. The majority of students, if they use these books, merely do so to revive their knowledge of dates and events rapidly at the end.

14. The system in giving notes is rather to discourage habits of cramming. Notes are intended rather to make students read. They are made purposely inadequate to pass examinations by their aid alone. The philosophy professor gives no notes, but depends upon discussion and illustration with diagram. Occasionally essays are set which require reading and books are suggested, questions are asked in class and discussions are started to make sure that students do not depend merely on notes and hand-books. This is possible in classes of moderate size.

(2) HOSTELS AND HEALTH.

1. The majority of students live either in their own homes or with relatives in Madras. Some are very poor and live in hotels, receiving their meals from organized charities that exist for the purpose of feeding students. We have one small hostel for a particular sect of Brahmans—the Vaishnavites of whom we have a larger number than of any other caste or sub-caste.

2. The manager of the hostel is a European, generally the Principal, but not in his capacity of Principal. The real work is done by two native assistants—an assistant professor and a master in the high school. Neither of them are whole-time men, but do it as extra work out of college hours. Neither of them receives remuneration. In the hostel there are twelve residents (though it can accommodate twenty students) and the superintendence is done by the high school master at present. The Assistant Professor in the college gives his advice in questions of rules, caste and discipline and appeal can be made to the manager. The hostel is itself a private house in Black Town and is surrounded by other private houses, except that on one side there is a *mantapam* which is used as a small boy's day school.

3. The supervision aims at keeping the students to a simple healthy life. It is based on more or less strict adherence to caste rules. The students pay one rupee *per mensem* as rent for rooms and nine rupees *per mensem* for food. The

rooms are small studies which two students share apiece. The furniture is kept as simple as possible—a chair, a table, a lamp and a box. There are two courtyards, a dining room, store-room and kitchens. On the top there is a good roof on which they can take exercise or work in the fresh air. The supervising official, aided by the native assistant professor, purchase all the good. It is of the best kind but simple, and an attempt is made to keep down expenses to as economic a level as possible. The food is stored and given out as needed by the Superintendent who keeps the keys. Sometimes he shares these duties with students. The students are encouraged to take exercise. Those who do not go to the college ground and play tennis, foot-ball, etc., are encouraged to take dumb-bell exercise in the hostel or walk on the roof. Beyond encouragement and advice the Superintendent has no power over the exercise of the students. With regard to the moral conduct of the students a very great deal rests with the Superintendent. He sees that the students, are in by a certain hour, and that lock-up is strictly maintained from 9 P. M. to 6 A. M. He prevents conversation that is demoralising both by prohibition and by example. He tries to create the sense of community among the students, who generally feel that the hostel life, because of its simplicity and freedom, is a good life. Quarrelsomeness is prevented. All rules for the management of domestic affairs are made by the Superintendent, but the students are allowed to suggest alterations. As to hours of seals, an attempt is made to suit the convenience of the students in the discipline enforced.

4. The present Superintendent, who does the work to his own inconvenience, is an old student of the college, is of the Vaishnavite caste, is a capital disciplinarian, has a high sense of duty, is approachable and friendly with the students. He is a graduate and teaches in the IV Form of the high school.

5. We play tennis, two courts, cricket and foot-ball. The games are for both college and high school combined. Games here are much handicapped by the difficulty in obtaining a ground. There is a large waste opposite the college, but it is only possible to get a very small space that is barely enough for two tennis courts and some gymnastic apparatus. We have no cricket ground, but can only pitch on the waste land. It is dangerous to practise there for several reasons; the fact that other clubs practice and balls fly in all directions, and from the fact that we can only play on very uneven ground and are not allowed to prepare a pitch, so that even with a mitigating effect of cocoanut matting the balls bump badly and fast bowling is out of the question. Foot-ball is equally handicapped; the ground is a waste of sand and pebbles. We cannot mark a ground or claim a separate patch. Practice games are out of the question. No games are compulsory in the college, but every effort is made to get students to take some form of exercise. Many do native gymnastics, for which there is a class daily throughout the week, others do English gymnastics. There are instructors for both kinds of gymnastics.

6. Students are left to look after their own health, except that they are not allowed to come back to college in cases of infectious disease without adequate medical certificate. In the hostel a doctor is called in and paid by the student or by a friend if the student is too poor.

7. No special steps are taken. It is left to the municipal authorities. As a matter of fact, nearly all students have been vaccinated at one time or another.

8. The rooms in the college department are well lighted and ventilated. The desks and benches are made in accordance with the requirements of the Madras Educational Rules. They are convertible benches. In the high school many of the class rooms on the ground floor are ill-lighted and ill-ventilated. Frequent complaints have been made in the principals' reports to the Trustees, but no steps have been taken presumably for lack of funds.

9. Cases are rare. None has occurred in the hostel which has been established for three years. Among other students, because they are not under control out of college hours, being all day-scholars nothing can be done.

(3) INFLUENCE.

1. The average number of scholars is 40 to each class. The majority are in the two F.A. classes and form 72 per cent. of the whole. The average to each lecture (including three pandits) is sixteen. If the pandits are excluded, the

average is 28. In the F.A. classes, except through the medium of essays which are regularly set and occasional papers and systematic questioning in class, where it is easy to detect the lazy students, individual attention is not as great as is desirable. In the senior classes which are respectively 22 and 23 much more is possible. As far as the amount of work and reading to be got through allows, the tutorial system in essays on English and general subjects and in particular on the science subjects is adopted. The maximum number is 71 in the junior F.A.; all lecturers, except the pandits who divide the class between Tamil, Telugu and Sanskrit, who take this class, have that number. The numbers given are those of the college at its present strength (161). They are about the average strength.

2. Yes, certainly. The college has a very good library on all the subjects taught in the college. Students are urged to read; the facilities to the library are good, and they are continually questioned as to what they are reading. The average student is guided by suggestion from his teachers and also by his knowledge of the names of good authors. The majority read books on grammar and criticism of English writers. They are allowed to take books for the vacation, and the library register shows that there is considerable keenness. In the senior classes books are suggested, and the evidence of examinations is that they are generally read. Inquiries are made as to what they are reading. Considerable censorship is used in the choice of books that are admitted to library. On an average 500 rupees worth of books are added yearly. Last year Rs. 750 was spent and the year before Rs. 1,000.

3. In addition to general advice given in class, private advice is given. The traditions here are that the students should have access to the teachers. The Principal has an office and generally encourages students to come to him and devotes as much time as possible. The philosophy professor has collected a very good library of up-to-date philosophy books and frequently forgets his own tiffin and makes the students forget theirs in talking to them. He lays stress on the necessity for wide reading and careful leading. There is a professor's room where the professors can always be found. Students are encouraged to come and see the professors in their homes. The younger native professors are as accessible as the Europeans and the older ones also give advice and encouragement.

4. In addition to the college hours and out of college, there are the opportunities of meeting on the athletic grounds. Also weekly lectures and debates are held and occasional meetings for literary, historical and philosophical discussion. To these the teachers come.

5. Yes, one Vaishnavite hostel (*vide supra* Nos. 1, 2, 3, 4 hostels). Occasional visits are paid by myself and others. The assistant professor, who is a Vaishnavite and whom I have already mentioned, takes a great interest in the institution.

6. No. At present there is no interchange of thought and influence. There undoubtedly should be some such communication. The great difficulty at present is that there is no organization of teachers. The 'teachers Guild' which holds annual meetings in Madras, seems to be in a moribund condition. It is too limited in its scope; its topic of discussion are too elementary. I would suggest the formation of society under the auspices of the University. Every teacher and professor should be registered by the University and compelled to be a member. Conferences should be held at which not merely general topics of education should be discussed, but special meetings of men engaged in a particular branch of study should be held and papers read that have involved original research. Thus, in history there is ample scope for original work in earlier Indian History. So also in philosophy there is much to be done in the way of connecting old Hindu philosophy with modern ideas and attempting to give it some unity. In view of the difficulty of distances, I would suggest that in each district branches of such a society as I suggest should be formed and delegates be chosen by each branch to the annual conference to be held in Madras or some other convenient centre. Further, I would suggest the publication of a magazine conducted by the University for the members of the society. At present educational magazines are of a comparatively low standard; the best men do not write and the topics discussed are usually of a controversial rather than a scientific nature. I suggest that the University

should found and organize such a society, because private initiative is generally lacking and the support is apathetic. Membership at first compulsory would afterwards become willing, when teachers of all grades have had developed a sense of community.

7. In addition to the scheme suggested above, a meeting of responsible professors, whether principals or not from each affiliated college, would be very desirable. Some uniformity in the nature of the teaching might be brought about. At present professors at a distance are at a disadvantage when compared with those in Madras; they cannot yet their recommendations properly considered by either the boards of studies or boards of examiners. Syllabuses are drawn up and suggested to the syndicate and senate with only nominal reference to those at a distance. It would be valuable if such a body were also used to select and nominate examiners. At present there is a tendency for such appointments to be made too much from teachers resident in Madras.

8. I would further suggest that the University should provide a number of specialists or lecturers, whose duty it should be to go from first grade college to first grade college, giving a series of lectures on particular subjects or branches of subjects. Such lectures should be in addition to the regular lectures given in the colleges. If the course for B.A. were lengthened to three years for ordinary degrees or four years for honour degrees, it would be more possible to get students to read and to get a thorough grasp of a subject. Such lectures as I suggest would then be stimulative to wider reading. I would propose some scheme of University extension lecturing not as in England to the general public, but to students already reading for degrees, but not in the University head-quarters. If a fourth year were added, the pick of the students in each affiliated college should be sent to Madras to read under specialists and the University would then have special buildings and special professors for that purpose. There would then be no need for an M.A. course.

9. Matriculation of the two alternative proposals about matriculation. I should prefer the second. To allow each college to matriculate itself, even with stringent University regulations, would be dangerous. The competition that at present exists in the form of secret scholarships would be slighted to comparative lowness in the standard of examination at entrance. I should therefore prefer that the matriculation be kept, but that it be no longer considered a qualification for Government service. The subjects suggested for matriculation seem good. Certainly the minimum pass mark should be raised to 50 per cent. at least and the papers shortened and stiffened. If matriculation were made the entrance to a University course as suggested, no certificates should be given for F.A. In that case I would suggest that the English and second language should alone be taken at the F.A. examination, and that it should be raised to B.A. standard. The remaining two years or year of the course should be devoted to the science course, or else the F.A. might be done away with altogether.

PACHAIYAPPA'S COLLEGE, MADRAS, }

J. A. YATES,

The 17th March 1902.

Principal.

4. BANGALORE CENTRAL COLLEGE.

(1) DISCIPLINE.

(i & ii) To test the quantity and quality of work done in the junior F.A. and junior B.A. classes, I have had for many years—

- (1) Registers of class work daily done by the professors in the different subjects entered at the end of each hour.
- (2) Systematic tests on Saturday mornings covering the portion of work done during the previous month, each professor in history, mathematics, English, etc., having one Saturday a month with each class, the tests being for the most part written tests.
- (3) Besides, the instruction is constantly supplemented by *vivā voce* cross questioning of the students as well as by home exercises in such subjects as mathematics and science which really admit and require such home exercises.

- (4) We have also two terminal examinations per annum—one at the close of each term, and attendance on which is necessary to secure the term certificates. Absence on medical certificate being permitted in special cases only for one of the term examination during the year. The prize list for the year is determined by the results of the two terminal examinations.
- (iii) There is no difficulty in dealing with students who shirk their work during the first or third year of their college course, as their attendance certificates are not granted unless they have been regular, and obtained passing marks in the two terminal examinations for the year.
- (iv) Absence from class without leave is not permitted. I have occasionally dismissed a student and removed his name from the roll for irregularity when I was not satisfied with the excuses furnished, but this has happened rarely. An absence of 25 per cent. from class work deprives a student of his attendance certificate for the term; and without this he cannot appear for the F.A. or B.A. examination.
- (v) No candidate thus excluded from the F.A. or B.A. examination can appear as a private candidate the same year; and he will have great difficulty in doing so until after the lapse of some years.
- (vi) Want of punctuality in daily attendance depends almost as much on the teacher as on the student; but, if necessary, a small fine is occasionally levied, such fines being credited to the Reading Room Funds.
- (vii) A good deal of home-work is necessary in connection with mathematics and science subjects; and with large classes it is exceedingly difficult to insure the conscientious performance of such home work further than by the professor ascertaining, by cross questioning of the students, whether they have done their home work themselves or not; but ability to insure conscientious individual work depends entirely on the moral influence and experience of the professor himself.
- (viii) The fees payable in this college are—
 Rs. 36 per annum, payable monthly for each F.A. year.
 Rs. 48 per annum, payable monthly for each B.A. year.
 A small extra fee is charged in B.A. practical chemistry to meet breakages of test tubes and such petty items. To prevent default in this respect, the extra fee is collected at the beginning of the term.
- We have not as yet taken B.A. graduates to study for the M.A. degree examination, as M.A. students are so few in number; and the work of teaching one or two would be almost as much as that of teaching half a dozen. A considerable number of our B.A. graduates have, however, studied for the M.A. degree in physical science and for that purpose have attended the Presidency College, Madras, the only Institution as yet properly equipped for such teaching. Most of these have had a Mysore Government scholarship of Rs. 25 monthly, to pay for their fees and cost of living in Madras. There they chiefly do laboratory work and get assistance with the reading of the higher theoretical portions, but get no regular teaching.
- (ix) As to reproof of students when they are guilty of any *breach of good manners*, but little difficulty has been experienced in this respect.
Cleanliness is encouraged by a reproof if need be, and by the belief in "example being better than precept."
- (x) Any breach of truthfulness on the part of the students is promptly and severely dealt with. For example, a student, who is guilty of *copying* at one of our terminal examinations is promptly expelled

from the class ; but this has happened only comparatively few times during the 20 years which I have nearly completed as principal of this college. A teacher is expected to behave to his class much in the spirit of a father to his family, by encouraging in every way in his power simple honesty on the part of the student, and by inculcating the doctrine that open confession of any fault will meet with much less severity than an attempt to conceal truth.

- (xi) I have had few disagreeable instances of dishonourable conduct exhibited by students. The moral tone pervading the students of this college has, during all the years I have been here, been quite as good as I had experienced in Scotland or England, or in Madras among European students.
- (xii) The recognised punishable offences in this college have never been tabulated and are such as exist everywhere in unwritten laws. The punishments inflicted are also similar to those which I have known in Scotch and English institutions, *viz.*, caning by the Principal in his own room in very exceptional cases ; occasionally fines ; impositions generally in the form of mathematical exercises to be done ; expulsion in serious cases ; corporal punishment and imposition are chiefly used in the high school classes and only very occasionally there.

Hindu students are much more amenable to reproof from their teacher than European students ; and my experience presents the average Hindu student in a most favourable light as far as discipline is concerned.

- (xiii) It is very difficult for the Principal to say what the students may have at home in the way of cribs, keys, abstracts, etc. He can only discourage their use by doing his best to render them unnecessary and by encouraging students to make their own abstracts of the work they do. I fear that cribs are used to a considerable extent in connection with the study of *vernaculars*—not to any great extent in mathematical subjects, because the examples set for home work are always taken from such books as the students do not have in their possession.

Aides memoires are mostly used in such subjects as history and physiology for the F.A. course ; but notes *quæ nauseant* are in use for all the *English texts* of both F.A and B.A. examinations.

- (xiv) The teacher can only counteract the effects of using *aides memoires*, etc., by the nature of the questions he sets in his periodical examinations and by his *vis à voce* cross questioning of students.

(2) HOSTELS AND HEALTH.

- (i) The undergraduates of this college live with parents or relatives or in the college hostel and a few in private so-called hotels in the city about half a mile distant ; but the number of these is very small since the first visitation of the plague in the latter half of 1898.
- (ii) The central college hostel is supervised by a superintendent resident on the premises whose whole time is devoted to this work. He is under the immediate *ex-officio* control of the Principal of the College, who also is aided with the advice of a committee consisting of the native professors of the college and certain independent native officials of respectable position. There are about 90 students in residence in the hostel, of whom 70 are undergraduates and the remainder students of the high school.

The hostel stands in an open compound adjoining the large college compound and is quite free from the neighbourhood of the city population.

- (iii) The superintendent endeavours to exercise the greatest care over the food, cleanliness and behaviour of the students ; and they have

excellent facilities for physical exercise and recreation which are largely taken advantage of in the way of cricket, foot-ball, gymnastics, etc., in the adjoining college compound.

- (iv) The superintending official is a man of previous experience in connection with a similar hostel. He is of excellent character, good education and in every way suitable for the post.
- (v) The out door games to which ample attention is given in this college have been already mentioned. They are not compulsory, nor are the athletic exercises under the gymnastic teacher compulsory, although physically healthy boys are encouraged to take a share in gymnastic exercises and are very ready to do so.
- (vi) The superintendent of the hostel at once reports to me any case of illness ; and, if necessary, medical aid is obtained at once, or the student is sent to the Victoria Hospital, one of the best in India. I am glad to say that no case of an epidemic nature has as yet occurred within our hostel, the utmost attention being paid to cleanliness of rooms and students.
- (vii) Statistics of vaccinated and unvaccinated are taken and submitted to Government with the annual report ; and, as a rule, there would not be more than one or two out of 400 who have not been either vaccinated or had small-pox.

Students are required by Government to be vaccinated before appearing for the Lower Secondary examination—a pass in which entitles a pupil to admission into a high school ; this is doubtless the reason of the widespread attention to vaccination in this quarter.

- (viii) The college class-rooms are well ventilated and lighted. The writing desks are not provided with backs, but are very conveniently constructed so as not to weary the student too much ; and in the case of the B.A. classes the students change rooms with each new subject every hour.
- (ix) A student, who manifestly shows a consumptive tendency, would be advised to consult the Chief Medical Officer of the Government Victoria Hospital here ; but I consider anything further than this would only occasion needless alarm to a student or his parents, and probably lead to their consulting useless *hakims*, which they are only too ready to do in any case.

(3) INFLUENCE.

- (i) The average number of pupils in each B.A. class is only 40, since the Maharaja's College at Mysore was raised to the first grade a few years ago. The average number in each F.A. class is about 80 ; the lecturer of course teaches the whole of an F.A. class or of a B.A. class at a time.
- (ii) The average student is encouraged by his professors to read as much general literature as possible and the college is provided with an excellent library of nearly 5,000 volumes and with a reading room where the best of the English monthly and weekly magazines are on the tables.
- (iii) Out of college hours various professors are accessible to the students in their own rooms in the college and there generally a good deal of visiting goes on.
- (iv) Pupils and teachers may come together on the cricket field and incidentally in many other places.
- (v) This question has been to a great extent answered already ; but there is no provision for tuition of resident students by any college tutor, though it is desirable that we should develop in this direction in the future. The hostel has not yet been in operation for 18 months and much naturally remains to be completed.

- (vi) It is difficult to say how there could be much intercourse between professors of the same subject in colleges situated at a distance in a country like this, especially seeing that there is more or less jealousy and competition between colleges, as is proved by the necessity a few years ago for the University publishing a set of inter-collegiate rules to prevent "sharp practice" on the part of one college with respect to another in the admission of pupils, etc.

There is a Teachers' Guild in Madras which meets annually, where papers on pedagogic subjects are read ; but, so far as I have observed, those who are the most ready to air their views on such occasions are not those whose opinions are of much value either from the educational standing of the person or from his ability.

- (vii) It does not appear to me feasible that a University council composed of *professors* from the several affiliated colleges should meet together to discuss inter-collegiate matters, as the professors have only very limited acquaintance with the general work of a college, each professor having enough to do, as a rule, with the teaching of his own subject. Thus, he might commit the head of the college to views of a question quite at variance with those which the head of the college might advocate if he were present at the council. It appears to me that, provided the head of the college and one or two of the senior professors be represented on the University Senate, there is ample opportunity for interchange of ideas over pedagogic subjects in the discussions that come up from time to time in the University meetings.
- (viii) The only other method that suggests itself to me of securing interchange of thought between the colleges and with the view of unifying and widening the influence of the University would be the institution of a University magazine where the various branches of learning might have a fair field for discussion without the narrowness and self-advertisement that generally attaches to educational magazines in this country.

(4) MATRICULATION.

- (i) Judging from an intimate acquaintance with the Madras University Matriculation and other Arts Examinations extending over nearly 25 years, I have no hesitation in saying that I strongly disapprove the suggestion that each affiliated college should be allowed to matriculate for itself, the candidate only paying a fee to the University for the privilege of having his name entered in the list of undergraduates. There is absolutely no parallel between the average affiliated college in this country and one of the colleges of the older English Universities. The present want of uniformity of standard would be increased ten-fold, and badly equipped and poorly officered second grade colleges would be found to bid for popularity by allowing inferior candidates to matriculate in large numbers, and I do not see how it is possible, if such matriculates are enrolled as undergraduates of the University, that another college could decline to admit them to its classes even though it might be notorious that students hailing from a certain college had unsatisfactory qualifications. It appears to me absolutely impossible *by defining more stringently than hitherto the qualifications required* to secure among a number of different colleges any approach to uniformity of standard, while at the same time by the very nature of the case the University had given up its direct control of the Entrance Examination. Under such a system I have not the least doubt that our Indian education would soon find its level, but a very low level that would be.
- (ii) I do not believe that the institution of a Departmental School Final Examination would have any appreciable success, unless at the same time the Matriculation Examination were to be displaced as a

recognised certificate of education for the purposes of the public service. In Madras the Upper Secondary Examination was instituted some years ago by Mr. H. B. Grigg, then Director of Public Instruction, Madras, with the same object; but it has been from the first an entire failure. It could not but be disastrous to the solidarity of high school teaching if two sets of pupils had to be prepared simultaneously in the same school for two entirely different examinations.

- (iii) I regard any such proposal as that the matriculation subjects should be reduced merely to English, a second language and arithmetic as a lamentably retrograde proposal; this would throw our education in the college department back a quarter of a century, because we should have to be doing in the F.A. classes the work left undone in the high school. On the other hand, I cannot imagine anything more dreary than a high school course with no greater variety than English, a second language and arithmetic. I have never heard before of such a limited range of intellectual exercise as this would mean for pupils of the age of those in our high schools. I can imagine no greater disaster overtaking high school education than the institution of such a course, and do not believe an instance of it can be found in any country that we might look to as a guide for education. To my mind such a high school course would be psychologically absurd in the face of the many sided character of the human intellect.

BANGALORE;
The 24th March 1902.

}

J. COOK, M.A., F.R.S.E.,
Principal, Central College, Bangalore

5. NIZAM'S COLLEGE, HYDERABAD DECCAN.

(1) DISCIPLINE.

1. A weekly or bi-weekly (as the case demands) examination is held on one or other subject.

2. In addition to the examinations held during the term, the beginning of each term is marked by what is called a post holiday examination.

This deals with certain portions of the work which were fixed at the end of the previous term and which are to be specially prepared during the vacation.

Failure in or absence from this examination may affect the position of those who hold scholarships.

3. If they hold scholarships, they are liable to lose them. If they are not scholarship-holders and if they are in no way a credit to the college (that is, if they do not assist in cricket or foot-ball), I suggest to them the advisability of removing their names.

We have, however, had very few examples of the 'loafer' type. Some seem to get hopelessly dull after passing their matriculation, but as that is their misfortune and not their fault, they are allowed to plod on.

4. An explanation in writing is always required of absentees.

All F.A. and B.A. students are required to keep the exact number of days required by the University to constitute a term. We are very strict about this, even to the extent of writing to the University for exemption, if a boy has missed his term by a single day.

5. No undergraduate is allowed to appear as a private candidate, except those who, having kept their terms, appeared for the examination and failed, have passed beyond our control.

I wish the University would exercise some control over these 'private candidates.'

6. A request is made that the student will try to be punctual in future. I have never known such a request to fail.

7. As far as English and Latin are concerned, we go steadily through the texts with notes and lectures on the language and literature.

I am not quite sure what is meant by the term 'home work.' No fixed task is set one day to be produced next day, if that is what is meant.

8. College fees for senior and junior B.A. classes, Rs. 40 per term, if paid in advance, or Rs. 44 per term in four instalments.

Of senior and junior F.A. classes, Rs. 32 per term, if paid in advance, or Rs. 36 in four instalments.

These charges are uniform.

No extra fees charged for laboratory.

The arrears from the defaulters are recovered after referring the matter to their guardians through the Government.

Graduates do not pay any fees for preparing higher examinations.

Yes, they do attend regularly.

9. Example is the only means we take. We do not find it necessary 'to enforce' good manners.

I do not think a greater mistake was ever made than when the University issued a code of rules entering into minute details as to what costume a boy was to wear, when he was to rise and when sit down, etc.

I declined to insult our boys by publishing the rules. If I see reason to find fault with any one, I speak to him privately and am glad to say that I have never to speak again.

10. & 11. The habit of truth-telling is only a part of the wider term 'a gentleman'. This is the standard that I set before them. The worst that can happen to a boy is to be told that he is not a gentleman.

12. There are no punishments except forfeiture of scholarship and expulsion, of which the latter has never been resorted to.

Impositions and fines are most certainly never employed.

Our endeavour is to impress on our pupils that they are no longer children, but grown up responsible beings, no man is fit to be a head of a college who would set an imposition to or fine an undergraduate.

If they are treated like school-boys, they will behave as such and probably end by breaking all the furniture.

13. There are very few cribs, keys, etc., that would be found of any use by the college students. It is for the Matriculation Examination that such things are produced. The "Notes" published for the English texts in the college course are usually carefully prepared and cannot be used without carefully reading the text.

14. If there is any acknowledged authority on any prescribed subject, they would probably be advised to secure his work. As lecturers, however, we write our own note and lectures. It is a fact, however, that the pupils are afraid to venture on original thought. They say that if they were to do so, they would most probably be ploughed, as so many of the examiners themselves are the outcome of the cram system. I am sorry to say that I believe this to be in some measure true.

In the Madras University very few "text-books" are set for the B.A. course. In such subjects as English language, English literature, history, political economy, the lecturer recommends books. These are bought by the students. Thus, for every course of lectures, the students read at least one book, and others in the college library are recommended for supplementary reading. Advanced students read a good deal.

(2) HOSTELS AND HEALTH.

1. In their own homes. No hostels are provided. We have a boarding school attached to the college, but it is meant only for the richer class.

5. We play cricket, foot-ball and hockey. In a recent foot-ball tournament we were able to put three teams in the field—one from the college and two from the school.

Games are not compulsory. The masters play cricket and foot-ball on most evenings with the boys.

6. We have a doctor attached to the college and school.

On several occasions we have had to close the institution owing to outbreaks of cholera or small-pox.

7. Pupils are not allowed to appear for the local middle school examination without being vaccinated.

8. No particular care is bestowed on the eyesight. No particular attention is bestowed on the desks or benches.

The light and ventilation is satisfactory enough as far as it goes, but Hyderabad has not yet got anything more than a private bungalow for the accommodation of its college.

9. The only case of consumption we have had was sent for a change of air to Madras, where he grew fat and healthy.

(3) INFLUENCE.

1. The present average is about 12, but we are suffering now from the fact that for three successive years the Hyderabad High Schools have been a complete failure in the Madras Matriculation Examination.

2. Students are encouraged to read outside their text-books. When they first join the college they scoff at the idea, but the majority of our B.A. boys are wide readers.

Many of them apply to the lecturers for guidance in the choice of books.

3. They can come to our rooms whenever they like and always do so when they want advice.

4. The students have a literary union, at which debates are held; in connection with this there is a reading room. I am afraid I have not attended the debates, as I should probably be a damper on the proceedings. I always, however, attend the 'at home' at the end of the term where light refreshment is provided.

5. No hostel is provided.

6. There is no interchange of thought or influence between ourselves and any other college.

The distance prevents any such interchange, and I do not see what good would result.

The best ground on which an interchange of thought with outside colleges might be effected would be the cricket or foot-ball ground.

7. I do not think any good would result from the formation of a council composed of a professor from each of the affiliated colleges.

The presence of members of Boards of Examiners in Madras has at times been taken advantage of for discussion of the subjects prescribed for the examinations and recommendations have been sent to the University authorities. In November 1901 there was, for instance, a meeting of five or six of the history professors, and letters with suggestions on the matters discussed were sent by two or three who could not attend.

I think the opportunity thus afforded of learning the views of others engaged in the same work is very valuable. But the value depends on there being no formality in the proceedings. If there were annual meetings, regularly called, they would tend to become formal and useless—people would want to read papers, for instance.

The selection and nomination of examiners ought to be the work of a special body.

8. I believe that it is absolutely impossible, even if it were necessary, to bring the distant colleges any more in touch. The only possible means is by inter-collegiate athletics, to be held at some more central spot than Madras.

As far as I can judge the best hope for the future lies in the smaller colleges of 100 to 200 students. In these it is possible to establish *esprit de corps*. Of course everything depends on the staff. If a man thinks that his work is finished when he has delivered his lectures, the sooner he returns to England the better. His duty is to know every student personally in so far as they will allow themselves to be known. If they are treated as gentlemen and responsible beings and not as children, they will be found to be responsive enough. If a man, however, regards himself as a very superior being, whose hard lot it is to have to impart instruction to a lot of inferior beings, it is not likely that the supposed inferior being will be attracted to or improved by the supposed superior being. My experience of Indian boys is that they are, on the whole, a very good sort.

It is wonderful how they come out and improve during the short college career of four years, but it is hard to have to fight against a bad school education of fourteen years.

I think it is a pity that the University Commission was not preceded by a Schools' Commission.

It is in the schools that their habits are formed; it is there they acquire the use of cram, the terrible pronunciation, the corrupt English, the sluggish and spiritless look, the bad manners, the contempt for their teachers, except as machines. When they join a college a whole year has to be spent in trying to correct all these errors. It sometimes takes a couple of months to make some of them smile.

(4) MATRICULATION.

I have already sent to the Nawab Imad-ul-Mulk Bahadur a suggestion almost identical with the second paragraph.

1. That the matriculation be what its name means, an examination for those desirous of entering on a University career.

2. In India I think, perhaps, a general examination for all the colleges is preferable to each college holding its own.

3. No certificates at all be given until the student takes his degree.

4. The pecuniary value of the matriculation and F.A. must be absolutely destroyed.

5. Some examination corresponding to the Oxford and Cambridge Local be established.

6. Before the actual matriculation examination comes on, it would be advisable to have a preliminary English examination in order to weed out those who palpably know nothing of the language.

With this object a piece of translation and an essay might be given some three months before the actual examination.

Each paper might pass through three hands, and if any two agree that a pupil's power of writing the English language is not enough to entitle him to enter on a University career, he must be referred back another year.

I think this step is necessary in order to prevent boys joining the F.A. class who know no English except a few grammatical puzzles, which would cause the average Englishmen to tear his hair in despair.

My idea of a University course is matriculation—good English up to the present F.A., good second language and mathematics as they are, but all catch questions to be absolutely excluded.

F.A.—(1) English almost up to the present B. A. standard.

(2) English second language.

- (3) The preliminary part of the subject which the student proposes to take as his specialty in the B.A.

B.A.—(1) English upto M.A. standard, but the philology might be excluded.

- (2) A special subject whatever is likely to be of use to the candidate in his chosen career.

E. A. SEATON, B.A. (OXEN), *Principal*,

The 19th March 1902.

Nizam College, Hyderabad Deccan

6. KUMBAKONAM COLLEGE.

(1) DISCIPLINE.

1. Certain portions are expected to be finished by a certain date, and each lecturer is held responsible for the work entrusted to him. The examinations referred to in the answer to the next question form of course an important means of testing both the quantity and quality of the work done.

2. Examinations are held during the term according to the discretion of the various lecturers. Examinations also take place at the end of the year in order to test the fitness of students of the junior classes for promotion to the senior. Students in the junior classes undergo fewer examinations than those in the senior for various reasons.

3. Students who shirk work are given a warning which is repeated when necessary. Where this fails, refusal of promotion at the end of the year in the junior classes and the withholding, in very bad cases, of certificates under bye-law 306 (1) of the University in the senior classes serve as sufficient deterrents to neglect of work.

4. Fining is the penalty, and in certain cases suspension from college for a short period. Students must attend college for three-fourths of the working days of each term.

5. A student who has not put in the prescribed attendance does not receive his attendance certificate, and cannot, of course, appear as a private candidate, as he has been reading in a college.

6. Every three days' late attendance counts as one day's absence.

7. No home-work is given except what is involved in the preparation for the next day's class work. Students are expected to answer ordinary questions put to them in class, and in mathematics to be able to write out précis of book work explained to them, and to work out questions on the model of those solved by the lecturer for their benefit.

8. Term fees for the F.A. classes amount to Rs. 32 and for the B.A. classes Rs. 40.

No physical science is taught in the college.

9. If a student is detected committing a breach of good manners, he is re-proved and shown where he has been in error. As regards cleanliness, I have found no occasion to encourage this habit, as the students are clean and tidily dressed.

10. No steps are habitually taken to foster a habit of truthfulness, but if a student is found telling untruths, he is reprimanded.

11. I find that a code of honour is practically non-existent.

Sports help to foster a feeling of honour, but all the students do not take part in games. Further, the short period of a few hours a day spent by students at college can do little to effect an improvement in this direction. I am afraid in cases of a breach of the code the general sympathy lies with the person who has erred.

12. Absence without leave is the chief punishable offence. Fines, which range from annas two upwards and suspension from college, are the punishments.

13. In English and the second language annotated tests are relied on to a great extent both in the F.A. and B.A. classes. The possession of these annotations leads in a great many cases to inattention during working hours at the college and to neglect of the use of the dictionary.

14. By questioning in class a lecturer is able to find out whether a student really understands the text, as many of the notes that are published merely give the meanings of words and phrases. Examination papers can be set so as to prevent a student who relies on notes from passing.

(2) HOSTELS AND HEALTH.

1. Undergraduates who do not live with relations are compelled to reside in hotels recognised by the Principal. Certain hotels are visited and reported on by one of the lecturers, and if the surroundings are sanitary and the management satisfactory, they are recommended for recognition.

5. The favourite games are football and tennis. Games are not compulsory, but drill is taught to the students of the F.A. classes by a trained instructor. A few practise ordinary gymnastic exercises.

6. The college authorities do not adopt any special means for the preservation of the health of the students. If an epidemic broke out, the college would probably be closed.

7. Before students are admitted they must produce certificates to the effect that they have been vaccinated, or must give proof that they have had small-pox.

8. No special care is taken of the eye-sight of undergraduates, but if any are seen to be short-sighted, they are advised to wear spectacles.

The arrangement of desks and the lighting and ventilation of the class rooms are satisfactory. Benches with backs are used.

9. No steps are taken by the college authorities in cases of consumption.

(3) INFLUENCE.

1. In the F.A. classes 60 ; in the B.A. 25. The answer to the second part of the question is the same as the first, except that in the science branches of the B.A. course each lecturer has about 10 pupils. No individual attention is paid to the students, except in so far as questioning in class may be said to be so. About 80 is the maximum number for each lecturer.

2. The average student reads a few novels and short stories in magazines, but undergraduates, who are desirous of improving their knowledge of English, read a fair amount, both of prose and poetry. Students are guided in their reading by the lecturers.

3. They may visit the lecturers at their houses.

No private room is provided for interviews between lecturers and students.

4. At the end of every month a tutorial meeting is held at which the tutors, who are members of the staff, meet their wards and enquire after their well being.

5. There is no hostel attached to the college.

6. The interchange of thought and influence here referred to does not appear to be feasible between colleges distantly situated. If possible, it would certainly be desirable. I am unable to suggest any means to bring about this interchange, except on the plan sketched in my answer to (4) Matriculation. Other plans might certainly be devised, but they are not likely to work for any length of time, as the merely occasional meeting together of the members of the staffs of various colleges at distant centres for the vague purpose of interchange of thought cannot by itself create that sympathy and community of interests which alone can make the meetings fruitful of results.

(4) MATRICULATION.

I am not in favour of allowing each affiliated college to hold an entrance examination, because if this is done, uniformity of standard must be lost. The scheme sketched below might lead in some measure to colleges in the various districts being drawn together and thus interchange of thought between the members of the staff of these institutions might be fostered. The scheme I propose

is as follows:—For purposes of entrance examinations let the Presidency be divided into five divisions—Northern, Southern, Eastern, Western and Central, the Eastern Division comprising the colleges of the City of Madras and the Central those of the Mysore State. In the Southern Division would be grouped together the colleges in the districts of Tanjore, Trichinopoly, Madura and Tinnevely; in the Western the colleges of Travancore, Cochin, Malabar and South Canara, along with those of Coimbatore and Salem; in the Northern the colleges of the districts north and north-west of Madras. Each of these divisions would hold an entrance examination for all candidates coming from schools within the division and would appoint examiners drawn from the 1st and 2nd grade colleges of the division. For the purpose of setting question papers there would be a board constituted of members chosen from the staff of 1st and 2nd grade colleges two or three from each 1st grade college and one from each 2nd grade. By this means uniformity of standard would be secured for each group of districts, and in order to maintain this uniformity throughout the Presidency, the following plan might be adopted. In the first instance, the boards of examiners would receive instructions from and be guided by the University, and delegates from each board would meet once or twice a year to consider any questions that might arise and refer them to the University for decision when necessary. These delegates would also meet to discuss the various points connected with the entrance examination, especially such points as would assist in maintaining an equal standard in all the divisions.

A fee, apart from the one levied by the University, would have to be paid by candidates in order to meet the expenses of the examinations, such as stationery, payment of examiner's fees, etc. The scheme sketched above is a rough outline of what might be done to draw into relationship, if not all the colleges of the Presidency, at any rate those of the same division. If when examined in detail this scheme is found impracticable, then I would abolish the matriculation examination as a test for purposes of public service, I am not in favour of reducing the subjects of the matriculation to three English, second language and arithmetic. Euclid and algebra and history and geography should be retained, the first two on account of the training they afford, and the last two, because if excluded these subjects would probably be entirely neglected. Science might be dropped and introduced in the F.A. course as an optional subject, the other optional subjects being physiology, mathematics and logic.

H. S. DUMAN,

Acting Principal, Government College, Kumbakonam.

7. MAHARAJA'S COLLEGE, MYSORE.

(1) DISCIPLINE.

1. The quantity and quality of work done in the junior F.A. and junior B.A. classes is tested (a) by oral examination, (b) by inspection of prescribed exercises, (c) by periodic written examinations.

2. For both F.A. and B.A. students written examinations are held at the end of the first, second and third terms and about the middle of the fourth term.

3. Students who have persistently shirked their work during any term are dealt with in two ways—(a) they may be refused the term certificate; (b) they may be promoted on trial, that is, the term certificate may be withheld, and its final grant or refusal made to depend upon the result of the next term's work.

4. Absence without leave entails the loss of a day's attendance. For persistent absence without leave a small fine is occasionally inflicted, but generally it is sufficient to remind students that to obtain term certificates they must attend three-fourths of the total number of working days. Until a few years ago discretionary power was given to the heads of colleges to reduce the minimum in exceptional circumstances to two-thirds of the total number of working days. It is highly desirable that this power should be restored, as there are occasionally cases in which the present rule operates harshly.

5. Under section 307 of the University bye-laws the syndicate possesses the power of admitting to examination as a private candidate a student who has been refused a certificate. I have never heard of a college student being so admitted when the certificate has been refused on the ground of his shirking his work. On

the other hand, I have frequently seen a *high school* student who has been refused admission to the matriculation examination as a school candidate appearing in the same year as a private candidate.

6. Students are not permitted to enter the class room after the professor or lecturer. Hence a student who comes late is absent and lose half-a-day's attendance.

7. A considerable amount of home work is given out to undergraduates and takes the form of (a) preparation of new work, (b) learning by heart of passages of poetry, (c) working examples in mathematics, (d) writing of English essays.

In the case of defaulters in the F.A. classes occasional impositions are inflicted. But in the B.A. classes the matter is left entirely to the good sense of the students.

8. The fees in the different classes are as follows :—

					Rs.
F.A. classes	...	...	...	...	3 per month.
B.A. classes. A. taken separately, English	...	...	...	...	2 „
Second language	...	...	...	...	1 „
Science	...	...	...	...	2 „
B., any two branches	...	...	...	...	3 „
C., all three branches	...	...	...	...	4 „

In addition there is an admission fee of one rupee when the student joins the college, and the following payments are compulsory in all classes of the college department :—

Reading room fee	...	...	...	One rupee, half-yearly.
Cricket fee	...	...	...	Annas eight for each term of four months.

Defaulters are dealt with according to the following notification :—

All fees must be paid between the 10th and 15th of each month. If any student fails to pay by the 15th of any month, he must pay his fees along with a fine of one anna per rupee on the 10th of the following month.

On the 11th of each month students in arrears will be sent out of the class and marked absent until their fees are paid.

Little is done to help graduates when preparing for higher examinations beyond giving advice in the selection of books. No lectures are given and no fees are charged.

- 9 to 12 (1) There is no code of punishable offences. Generally speaking, any breach of good manners is a punishable offence ; but there is no complete definition of good manners.
- (2) The rules of discipline included in Madras Educational Rules are in force with this exception that since the outbreak of plague students have been allowed and encouraged to wear shoes at all times with or without stockings and trousers.
- (3) Cleanliness is encouraged by occasionally sending away a dirty student until he gets clean clothes : but there is a comparatively low standard of cleanliness in the college owing to the general poverty of the students. To insist on a new suit of clothes would in many cases deprive an underfed student of some food. If this subject is to be dealt with effectively, it must be done by preventing poor students from matriculating, and it may fairly be doubted whether such a measure would meet with general approval. I think it can be claimed for the present system that there is on the average a gradual improvement in cleanliness as the student passes from the lowest to the highest class.
- (4) Truthfulness is not treated differently from other virtues ; it is encouraged by practice rather than by precept. The most common form of untruthfulness met with is the concealment of material facts as regards circumstances in applications for scholarships. When this is discovered it is met by removing the student's name from the list of applicants.

- (5) The following offences have been punished at different times; committing nuisance in public; cribbing at class examinations; insolence to a junior master; persistence in wearing native shoes in class; offering a bribe to the college writer.
- (6) The punishment varies with the nature of the offence and the age, means, and class of the offender. Thus, in the high school department corporal punishment is resorted to in serious offences. In such cases I send for the boy's father or nearest male relative available, who inflicts the punishment by caning privately in my office. In cases where no male relative is available I act myself in *loco parentis*. But offences calling for corporal punishment are rare.
- (7) In the college department corporal punishment has never been inflicted; but students have been fined, made to write out a number of lines, or made to write an apology to a master.
- (8) There is a fairly high standard of morality among the students. There is very little shirking of work: failure is generally due to want of ability rather than to idleness. In one respect the students compare favourably with the students of Glasgow or Cambridge—in their respect for the college authorities. Organized insubordination is unknown, and little sympathy is shown by the students for a fellow-student who has been punished.

13. & 14. Summaries of history are not uncommon; and collections of questions and answers to old University papers are used by students in matriculation, history, physics and chemistry and in F.A. history and Physiology. Also voluminous notes on English texts are freely used in all the college classes. Except in the case of English texts, the use of such work is discouraged, but not prohibited. In the case of English texts, students who possess the notes are warned to beware of inaccuracies which are unfortunately only too common. The students actually read the English texts in the class; and in other subjects they are orally examined in prescribed portions of the prescribed text-books. Hence it would be impossible for them to neglect the prescribed text-books to any great extent without getting into trouble. In the class examinations in English the papers set are such that the students could not possibly do well by relying entirely on their notes.

(2) HOSTELS AND HEALTH.

1. The undergraduates live either in hostels recognized by the college or else with parents or relatives or guardians.

At present there are four hostels recognized—

- (a) The college students' hostel, open to all college students, managed by a committee of influential Government officers under the presidency of Mr. Thomas Denham, Professor of History, maintained partly by Government grant.
- (b) The Ursu students' hostel, open to Ursu students, managed by the Palace Comptroller, maintained by grant from Palace Funds.
- (c) The Hardwicke college students' home, open to Native Christians, managed by the Wesleyan Mission authorities.
- (d) The Hindu orphanage, open to Brahmin orphans, managed by a committee of Brahmins, maintained by public subscription.

2. In the College students' home there is a native superintendent subordinate to the European President of Committee. He is also a lecturer in the college. He is assisted by a whole-time manager who supervises the purchase of stores and the internal arrangements of the hostel. The hostel if full could accommodate seventy students. The average number is about fifty. These are divided into four groups, living in separate blocks. The students in each block elect a prefect (subject to approval by the president) who reports any irregularity to the superintendent. The superintendent lives near the hostel and is responsible for the discipline of the inmates.

The students have the right of appeal to the principal of the college: and the principal has the right of interference with the administration in any matter affecting the interest of the hostel or the college. The hostels are all in the immediate neighbourhood of residential bungalows occupied for the most part by Government or Palace officials, and two of them have extensive open grounds in front belonging to the college.

3. The superintendent visits the students' rooms frequently and pays attention to the cleanliness and tidiness of the rooms and the conduct of the students. As regards the food, the superintendent habitually, and other native members of committee occasionally, exercise a check on the quality of the food provided: no student is compelled to take any particular form of exercise, but dumbbells and Indian clubs are largely used and football is popular. The superintendent is empowered to punish by fines, or in extreme cases by dismissal (subject to the approval of the president) any instances of improper conduct.

4. The superintendent, Mr. B. N. Dasappa, is a graduate of the Madras University with some experience of hostel life in Poona and Bombay. In the college he has been a lecturer in English for some years up to the F.A. standard and takes the Kanarese translation of the B.A. classes.

5. In the college football and cricket are both popular. The materials are supplied at the expense of the cricket fund. There are two tennis courts which are kept in order at the expense of the cricket fund, but students who use the courts must provide their own bats and balls, and on this account this game is not so popular as cricket or football. No games are compulsory, but students are advised and encouraged to take some form of exercise.

There is also some gymnastic apparatus in the open air and exercises are supervised by a qualified instructor. Both Sandow's and MacLaren's exercises are taught in the evening after class hours, but attendance is voluntary.

6. In the college hostel, the civil surgeon (native) is *ex-officio* a member of committee and attends all cases of sickness reported to him. In cases of sudden illness in the college the civil surgeon is called in.

7. Students must either have been vaccinated or be small-pox marked. A student's statement that he has been vaccinated is accepted without medical verification. A student who admits that he has not been vaccinated is compelled to absent himself until he produces a medical certificate. Re-vaccination at stated intervals is not compulsory.

8. Nothing is done to test or preserve or protect the eyesight of the scholars. The lighting and ventilation of the rooms are good. The desks used are reversible desks of uniform pattern and size, so arranged that they can be used for class purposes, for public examinations, and for public lectures. Reversible desks when used for class purposes have no backs.

9. There is no periodical medical examination of students: students who wish it are given a recommendation for medical treatment at the general hospital. Incipient consumption is not treated differently from other incipient diseases. When students are believed to be suffering from infectious disease, or when it is reported that an infectious disease has broken out in their houses, they are required to produce a medical certificate.

(3) INFLUENCE.

There are at present 352 pupils on the rolls of the institution divided into eight classes—two B.A., two F.A., matriculation, fifth form, and two divisions of the fourth form. Most of the lecturers in the college department take part in the teaching of the high school department, so that it is scarcely possible to separate the two departments. The number of lecturers (excluding pandits) is 11. This gives an average of 44 students to each class and 32 to each lecturer. If pandits are included, the number of lecturers is 16, giving an average of 22 to each. The largest class is the matriculation class with 71 pupils. The individual lecturer who has the largest number of pupils is an assistant master who teaches history and geography in six classes with a total of 292 pupils. In all the classes the students are constantly being examined orally in the work of the class.

2. The average student does a certain amount of reading outside his text-books. Newspapers and magazines are supplied to the college reading room; and there is a small college library from which students borrow books. Some of the students get tuition in Sanskrit under the guidance of their parents. In connection with the B.A. history classes there is a historical society for which a considerable amount of reading is done under the direction of the professor of history. In the B.A. English classes a good deal of reading is done in English literature in preparing for English essays.

3. The principal and professors of history and English have each a private room in which they can, and do, receive pupils privately during college hours, and the other lecturers have a common room. Students have access to their teachers out of college hours, but habitual intercourse of this kind is not encouraged. Students and lecturers have both got their work to prepare in the mornings; and in the evenings the majority of the students are under the charge of their parents, relatives or guardians, as the case may be. On the other hand, it is not desirable that teachers should cut themselves off from intercourse with their fellow-men; and students are—very properly—excluded from the clubs where the teachers meet their friends in the evening.

4. Teachers and students come together to some extent on the cricket and football ground, and in the historical, literary and other debating societies in connection with the college.

5. I do not visit the college hostel often, but Mr. Denhem, the President of the Committee, does so frequently, and Mr. Dasappa, the superintendent, constantly. The students have as much tuition in college classes as is good for them, if not more.

6. So far as I know there is no official interchange of thought and influence between colleges distantly situated. But there is a certain amount of intercourse between individual members of different colleges. Then members of the different boards of examiners meet occasionally in Madras, and it is reported that they talk a good deal of shop on such occasions, but I cannot speak from personal experience. Lastly, there is the Teachers' Guild in Madras which holds a conference annually in December to which members of the different colleges are invited. I have never been present at any of the meetings. And judging from the published reports of the proceedings, I should think that the meetings are neither very cheerful nor particularly stimulating. But others think differently, and there is nothing to prevent any individual member of a college, whose vent lies in that direction, from joining the society and discussing educational matters to his heart's content.

7. An official council of educational experts, without executive power, and prohibited from discussing fully the educational policy of Government, and criticizing freely the speeches of public officials on educational matters, would be worse than useless. Under present circumstances the discussion of inter-collegiate matters is much better left to the senate on the one hand and to voluntary agencies like the Teachers' Guild on the other.

8. Owing to the distance of many of the colleges from Madras, it is unreasonable to expect that there can be much interchange of thought or influence. On the other hand the University has shown itself to be singularly unsympathetic to the local educational difficulties of distant centres, and to the claims of affiliated colleges for effective representation on the senate; and the unbusiness-like way in which the University conducts much of its business appears to indicate that the work to be done has far outgrown its capacity. The remedy seems to me to lie in splitting the University up into several Universities. In particular, I think that if the Mysore Government were to spend on a University at Bangalore the same amount of money that it is prepared to spend on the Tata Institute, the result in the long run would be infinitely greater in the promotion of original research than it is likely to be under the present scheme.

If the area over which the University exercises jurisdiction were restricted, it would be comparatively easy to increase the facilities for intercourse and interchange of thought and influence between the constituent colleges.

(4) MATRICULATION.

The charge brought against the present matriculation examination that it has failed to secure uniformity of standard has been unduly emphasized. The proposed scheme of allowing each college to hold its own matriculation examination would increase the want of uniformity and would leave un-redressed the more serious evils that result from the present matriculation examination. The policy of leaving things to find their own level in course of time can scarcely be called a policy of perfection, and would most probably lead to an increase in the mutual jealousies of different colleges and a multiplication of the present vague charges of slackness and want of discipline.

As regards the alternative proposal, it is undesirable to increase the number of examinations for school boys. If a school final examination worthy of the name is instituted—and no real reform of high school teaching will ever be effected in this country until such an examination is instituted—there will be no necessity for a further examination for admission to the University. The certificate of the school final examination board in certain specified subjects should qualify for admission to the University. The general estimation in which the matriculation examination has been held would appear to indicate that the management should be entrusted to a board nominated by the University rather than to the Local Governments.

As regards the proposal to reduce the number of subjects for matriculation and raise the standard, I think it is almost certain that any attempt to raise the standard in English will result in an increase in the average age of matriculates. But at present the average age of matriculates is so high that the older students are incapable of tackling the school boy subjects of the F.A. course: and if the average age is increased, and the original equipment in mathematics diminished, the evil will be intensified. In a word, the University is at present engaged in a struggle against nature in which nature is certain to have the best of it. This scheme, if carried into effect, will simply lead to a continuance of the struggle and an increase in the odds in favour of nature. It would be more prudent to abandon the struggle at once for nature is sure to win.

J. WEIR, M.A., F.M.U.,

Principal, Maharaja's College, Mysore.

सत्यमेव जयते

8. MAHARAJA'S COLLEGE TRIVANDRUM.

(1) DISCIPLINE.

1. The quality and quantity of work done in the first and third year classes are tested by periodical written examinations and by questions in class. Three written examinations are held annually in each class: the subjects in each comprise the work done since the preceding examination, and the standard set is as nearly as possible that of the University examination for which the class is preparing. A record is kept of the marks obtained by each student.

Each professor keeps a register in which entries are made as to the manner in which each student does his daily class work. The name of any student found to be doing unsatisfactory work is sent to the principal.

2. The dates of the periodical class examinations are—

10th April (end of first term).

7th September (middle of second term).

25th November (end of second term).

The examinations are conducted by means of printed papers: the time-table closely resembles that of the University examination for which the student is preparing, and as stated above the standard is similar. The answer papers are corrected and valued by the professor in charge of the subject, and in returning

them to the students he devotes an hour to an explanation of the questions and to a criticism of the best and worst papers.

3. *Persistent* shirking of work is rare and any student who tried it would at once find that his name had been sent to the principal, who would make an entry regarding it in the progress and conduct register. (See paragraph 12 below.) There may, however, be cases of unsatisfactory work, and these are dealt with as follows:—At the beginning of the second and fourth year the marks obtained in class examinations during the first and third years are closely scrutinized and the professors' registers of class work are consulted. Those students who have not secured a certain percentage of marks in the class examinations or who have not shown evidence of continued diligence throughout the year are informed that the principal declines to sign the certificates for the previous year which are required for admission to the respective University examinations. Such students are not promoted to the second and fourth year classes and have to take another course in the first or third year classes. If, after this second course, a student still fails to reach the requisite standard; he is asked to remove his name from the college rolls. We give no encouragement of any kind whatsoever to laziness or to proved incapacity.

4. Absence from college or from any class lecture has to be accounted for by the student. If sickness be the cause, he must inform the principal at once. If the Principal is not satisfied as to the sickness, the student is required to produce a certificate from the medical officer in charge of one of the four Government hospitals in the town. If the absence be due to any cause which can be foreseen, the previous permission of the Principal is necessary. If no satisfactory explanation of absence is forthcoming, an entry of the fact is made in the progress and conduct register.

The number of daily attendances necessary in order to obtain an attendance certificate is laid down in Bye-law No. 306, Madras University Calendar.

5. No student, whose name is on the rolls at the time of application for a University examination, is ever allowed to appear as a "private candidate." To this there is no exception. Such practices are not countenanced in this college.

6. Unpunctuality in attendance is dealt with as follows:—The Principal calls the college roll at 10 A.M. on each day. If a student is not present at roll-call, he is marked absent for that day and has to account for his absence as explained in paragraph 4 above. If he comes late, an entry is made in the progress and conduct register, and if there be two such entries against any student during any month, the repeated unpunctuality constitutes an offence against discipline and the student is warned by the Principal.

Persistent unpunctuality would thus lead to loss of term certificate and ultimately to dismissal. The strictness with which these rules are carried out is such that repeated unpunctuality is rare.

7. In almost every subject home-work has to be done by the student. Portions of English text and literature, history and philosophy have to be prepared for the class lectures and for class questions. In mathematics home-work has to be done in the form of a considerable number of problems and riders. In other subjects such as chemistry, physiology, physics, physiography less home-work is prescribed, as the instruction is principally in the form of lectures and demonstrations in class, and the work of the student consists chiefly in taking notes and studying these at home.

Home-work is tested by questions in class and also by examination of any written exercises which may have been prescribed. Should any student show neglect of home-work, by failure either to answer class questions or to bring the prescribed exercise, his name is sent to the Principal who makes an entry of the fact in the progress and conduct register.

8. The rules followed with regard to fees are detailed in the notice appended to this memorandum. The rate of fee is Rs. 4 per mensem for the full course and is the same for all the four years' courses. An extra charge of half a rupee per mensem is made for the use of the chemical laboratory. Defaulters are fined and attendance on class is not permitted if fees or fines are in arrears.

Graduates preparing for higher degrees are allowed the use of the college library free of charge. They are also permitted to work in the laboratories free of charge.

There are no regular courses of instruction for higher degrees, but any graduate who wishes to study for such a degree is given every possible assistance and facility by the college staff and that without charge.

9. No positive rules are laid down as to good manners, nor is it found that the students of this college are lacking in their sense of propriety in this respect. In the first place, the West Coast student is a much milder specimen than his East Coast brother. Secondly, the student in this college knows perfectly well that misbehaviour of any kind is not tolerated. During the twelve years I have been in this college, during ten of which I have been Principal, I have had only three cases of actual rudeness on the part of a student towards a teacher. The students here are exceedingly courteous. If there be any cause for complaint, it is almost always in the case of students who come to us from some other college where discipline is evidently lax. I can state it as a fact that students who come to us from the Christian College, Madras, are, in two cases out of three, distinguished by their rudeness, want of courtesy and their generally objectionable manners. This is usually discovered within a few days of their admission and the student is at once warned that another instance means immediate dismissal. This generally has the desired effect.

No special efforts are put forth to ensure habits of cleanliness, for none are required. I very occasionally see a student with a coat or shirt which is not so clean as it might be, but a slight hint is sufficient to set the matter right.

10. With regard to the truthfulness of students, we very seldom have a case requiring disciplinary measures, and I cannot say that any positive "steps are habitually taken to foster the habit of truthfulness." This is by no means to be taken as meaning that we are in the least careless in the matter. The reverse is the case. Deliberate falsehood would involve the severest punishment short of dismissal, but if the offender had a previous bad record, he would be dismissed.

The discipline of the college is wholly directed towards the development of the ideas of justice, fairness and propriety in all things, and I am convinced that it is a more powerful factor in fostering the habit of speaking the truth than any amount of didactic teaching.

As far as I have observed, the students are truthful to each other and are strictly so in their games.

11. The discipline maintained in this college has many marked effects, but two circumstances retard the development of any special code of honour among the students themselves. The first of these is that there is no residential system. The second is that the students are not associated together in many of the numerous conditions which demand the exercise of honourable feelings. There are many things, however, which tend in the direction indicated. One is the tolerably correct idea of what is fair and just, both in their dealings mutually and with the college staff. Another is that (with the exception of a few "chronic" who come from other colleges) the students have a pride in their connection with the institution and would do much to avoid disgracing its good names. I have had to rely upon them on many occasions and have never once found that my trust in their honour as a body of young men has been misplaced. The students of this college have certain privileges on some public occasions and in no case have they abused them.

12. The recognised punishable offences in this college are—

- (a) Absence without leave or without satisfactory explanation.
- (b) Absence from class examinations.
- (c) Unpunctuality.
- (d) Causing a noise within hearing of a class at work.
- (e) Not being in a class-room immediately after the college bell rings for the assembly of classes.
- (f) Disrespectful behaviour towards any member of the college staff.

The above offences are dealt with by making an entry of the facts regarding each in the progress and conduct register (see below), but in the case of (b) the term certificate admitting to the University examination is refused. There are of course other offences which are so obviously serious offences that special measures are required. These are copying or "cribbing" at examinations, open insubordination, moral indecency, deliberate falsehood, etc. These would be punished most likely by suspension for a term, but if the offender had a previous unsatisfactory record, he would most certainly be dismissed.

No impositions are given, nor are any fines levied as punishments.

The progress and conduct register, which has been referred to, is kept by the Principal and is managed in the following way:—The name of any student who commits any of the offences detailed above, or who is reported to show any carelessness or want of diligence in class-work, is entered along with particulars of what has taken place. The student is informed of the entry and is given at the same time a full opportunity of explaining anything in connection with his misconduct or want of progress. If three such entries have to be made against any particular student, he is seriously warned by the Principal. Should any further remark be made against him, he is summoned before the Principal, his record is read over to him, and he is then dismissed. A student thus dismissed is never re-admitted.

The method adopted is known to every student and dismissal is rare. Cases arise in which students, while not positively ill-behaved or lazy, are generally unsatisfactory. Such students are told at the end of a term that they need not re-appear the next, and are asked to take their names off the rolls. I may also mention that we take cognisance of the behaviour of the students while outside the college. For example, any student convicted of a criminal offence would most certainly be expelled.

13. The discipline of the institution is, I consider, excellent and one could scarcely wish for better behaviour. Yet, in spite of the strictness which is exercised, there are extremely good relations between the staff and the students. I find that if they know that they will receive impartial justice, they are prepared for little mercy. I consider it an absolute error to treat students in the heavy-fatherly, or rather the grandmotherly, way in which they are dealt with in some colleges, particularly some, but not all, Mission Colleges. In such institutions they are petted and spoiled: their offences against proper discipline are unchecked and diligence is not insisted upon. We have made it an absolute rule in this college that the student who will not work or will not behave himself in a proper manner shall not be tolerated for a single day after his true character in these respects has been ascertained.

14. The only subject in which cribs or keys are used in English. They take the form of annotated editions of the text prescribed, and some, if not all, are most pernicious. They are not, however, relied upon to an extent which can be termed considerable.

15. The professors of English give lectures which are fully explanatory of the text studied. They also indicate what books should be read along with each. It is found that if instruction be sufficiently thorough, the student does not rely on annotated editions and prefers the notes of the professor's lectures.

(2) HOSTELS AND HEALTH.

1. The undergraduates of this college live—

- (a) with their parents or guardians,
- (b) with relatives,
- (c) in rented rooms, or
- (d) in the London Mission hostel.

The majority are to be found under (b) and (c) above.

No hostel under the supervision of the college authorities has as yet been established. The Travancore Government has, however, taken steps to have this done immediately and very soon we shall have a hostel close to the college and under the management of the college authorities.

The London Missionary Society has a hostel, open to all classes of students, but it is only used by Christians. It is under the immediate supervision of a European Missionary, and as far as I have heard is well conducted. It is not as yet under the inspection of the college authorities, but will be as soon as our own hostel arrangements are complete.

(2), (3), (4) See (1) above.

(5) The games played are tennis, football and cricket. No games are compulsory. No exercises of an athletic kind are gone through *habitually* by the students.

(6) Under present arrangements there being no hostel or other collective residential system, it is difficult to make any special arrangements regarding the health of students, but I enquire into every case of illness and whenever possible try to get students to accept the best medical advice and treatment available. In cases of sudden illness we get immediate assistance from the Trivandrum General Hospital which is close to the college.

In epidemics of cholera and small-pox the students are warned as far as possible of the dangers and are informed as to the best preventive measures.

(7) Vaccination is compulsory. Small-pox has recently appeared in the town, and I have had *every* student re-vaccinated. Any student who refused to submit to the operation would at once be turned out.

(8) No special measures have been taken to protect or preserve the eyesight of students. The writing desks are properly made and with a suitable slope. The seats are in some cases too narrow, but I am having these altered. All benches have backs. The lighting and ventilation of the building are as nearly perfect as possible. The length of the building lies athwart the direction of the prevailing wind, and as the class rooms are in a single line, each gets thorough ventilation.

(9) Any student showing evidence of consumption would be sent to the General Hospital where he would get the best advice available here. Such a case would never be neglected or left to run its course without something being done by way of remedy or alleviation.

(3) INFLUENCE.

(1) The average yearly number in each class of the college is about 45, and this is the average number taught by each lecturer who takes a whole class. (By a whole class is meant a class studying a compulsory subject: where there are optional subjects, the class is divided into two or more sections.) The maximum number which has been taught at any one time by a professor has never exceeded 70.

(2) The students do a considerable amount of reading outside their text books. The college library at present contains about 5,000 volumes, and this number will be considerably increased next year. Each student is allowed to have three volumes from it at a time. On an average each student takes out about 40 volumes annually, besides using the reference library. (The college is open $8\frac{1}{2}$ months in the year.) The students receive every encouragement to read widely, and they are guided in their choice of books by the professors, who frequently assist them with books from their private libraries.

The college reading room is supplied with the following periodicals:—

The "Times" (London.)
Spectator.
Madras Times.
The Hindu.
Punch.
Black and White.
Illustrated London News.
Boys' Own Paper.
Indian Journal of Education.
Madras Educational Review.

Nature.
Chemical News.
Knowledge.
Mind.
Chambers' Journal.
Strand Magazine.
Nineteenth Century.
Contemporary Review.
Indian Antiquary.
Daily Graphic.

Madras Review.

(3) Students may see professors at their bungalows on Saturdays during college terms between 10 and 4. They may also visit professors at other times.

The professors have a room in the college where they can speak to students privately.

(4) Students meet the professors in the college literary society at the weekly meetings, of which a professor, usually the Principal, presides. Also at such games as tennis and football.

(5) See II (1) above.

(6), (7), (8). There is practically no interchange of thought or of influence between colleges distantly situated. Recently I had some informal correspondence with the Principal of the Central College, Bangalore, and the professor of physics at the Presidency College, Madras, regarding the proposed B. Sc. degree. The professors of this college were fully in sympathy with the proposal to establish science degrees, and it is to be regretted that this sympathy could only be practically expressed by attending a meeting of senate. Since this involves a journey of over 1,000 miles and the absence of three professors from college for at least a week, it is practically impossible. The syndicate might, I think, show some consideration for the opinions of fellows living at great distances by attempting to have such important subjects discussed at a meeting convened during one or other of the vacations.

I therefore think that there should be some exchange of ideas between professors in different colleges, in order that teachers of the same subject may agree on some common line of action with regard to teaching and examining in that subject.

I have proposed in a separate memorandum submitted to the Commission that the professors of first grade colleges teaching in any given subject should be formed into a body which could perform the functions of the present board of studies and board of examiners in that subject. This would remove many of the difficulties which at present obstruct the path of reform and improvement. With the present methods of procedure, it is almost impossible for those interested in a given subject to get a hearing in University councils, and even if a proposal reaches the senate, it is too often swamped by the votes of those who are absolutely ignorant of the merits of the question on which they vote. As a recent example, the Commission have only to consider the way in which the proposal to establish science degrees was treated by the Madras Senate. A miscellaneous crowd of missionaries, municipal councillors and professors of almost every subject under the sun, except science, combined to wreck it, and they succeeded.

But let the board which I have proposed decide upon a matter and let the senate merely confirm it, and there would be an end of most of the present difficulties.

(4) MATRICULATION.

The first proposal that affiliated colleges should be allowed to conduct their own matriculation examination, would be good one, but for one thing which would, I think, make it hopeless. This is that those colleges whose existence depends largely upon the number of their students would at once pass a large number, and this evasion would be difficult to detect and still more difficult to punish. Students would very soon find where they could pass most easily. Again, it would be fatal to give the power of passing matriculates to second grade colleges, which are in most cases overgrown adventure high schools. It is quite true that in course of time things would find their level, but it would be a low level, and probably characterised by scandals of a most disgraceful type.

The second proposal to have a separate examination for the public service is very much to be preferred. The only objection which I can see to it is that unless the character of the two examinations were so radically different as to require a bifurcation in study after, say, Form IV, the pupils in Form VI of high schools would have a try at both the matriculation and the public service examinations, with the result that we should then have two evils instead of only one.

In any case it would never do to confine the scope of the matriculation examination to English, vernacular and arithmetic, even although the percentage required for a pass were considerably raised. The standard is low enough at present without making it ridiculously low.

A. CRICHTON MITCHELL,
Principal.

APPENDIX.

Under sanction of Government the following rules relating to fees payable in the College were introduced with effect from the 26th January 1901 :—

I.—Fees in the college are charged at the following rates :—

					Per annum.
					Rs.
F.A. classes	...	...	...	...	48
B A. classes—English branch	...	...	...	...	30
Optional science branch	...	...	...	...	30
Second language branch	...	...	...	...	12
All branches to gether	...	...	...	...	48
Laboratory charge	...	...	...	...	6

II.—The admission fee is Rs. 3, but is not charged in the case of those admitted from Government high schools.

III.—The fees are due in nine instalments on the following dates or, if the college be closed on any of these dates, on the first day thereafter upon which it may be open—

Instalments.			Amount due.	Date.
1st	...	...	$\frac{1}{2}$ of annual fee	15th January.
2nd	...	...	$\frac{1}{4}$ "	15th February.
3rd	...	...	$\frac{1}{4}$ "	15th March.
4th	...	...	$\frac{1}{4}$ "	15th April.
5th	...	...	$\frac{1}{4}$ "	1st June.
6th	...	...	$\frac{1}{4}$ "	1st July.
7th	...	...	$\frac{1}{4}$ "	1st August.
8th	...	...	$\frac{1}{4}$ "	1st September.
9th	...	...	$\frac{1}{4}$ "	1st October.

IV.—A fine of 7* chuckrams will be levied in every case in which the fee is not paid on or before the prescribed date, and if not paid within one month after the prescribed date, the fine levied shall be one rupee. Attendance on classes is not permitted if the fees due have not been paid up to date.

V.—Students are to clearly understand that the fees are annual or term fees, and that their payment by instalment is only allowed in order to suit the convenience of those who are unable to pay the fees in one instalment. A student who attends any college class is therefore liable for the whole fee for the term in which he attends.

BOMBAY.

9. ELPHINSTONE COLLEGE, BOMBAY.

(1) DISCIPLINE.

Question 1.—See (2).

Question 2.—Examinations are held at intervals throughout each term. Whenever a professor thinks fit, he holds an examination and the results are recorded in the college examination book. Students are warned that failures in or absence from these examinations may prevent them from being allowed to appear at the University examinations.

Question 3.—Men who thus shirk their work generally attend lectures regularly, so that they are seldom detected, as large classes afford little time for questioning. Students are, however, deterred as much as possible from shirking their work by the examinations described above.

Question 4.—Students are liable to be fined when they are absent from the lectures. Students must attend at the college roll-call for 60 days each term, or they are prevented from appearing in the University examination. They are also warned that, besides answering the roll-call, they must attend lectures regularly. Cases of absence from lectures are reported to the Principal.

Question 5.—No.

Question 6.—We have no occasion to punish for this fault. The students arrive punctually so as to secure good places in the lecture-rooms.

Question 7.—We seldom give home-work to undergraduates. Composition exercises are done in the college class-rooms.

Question 8.—Rs. 120 per annum. Scholars pay half that amount. The charge is uniform for all the four years. No extra fee is charged for laboratory work. The defaulters are not allowed to attend the college. Students of non-Government Colleges have to pay Rs. 30 per term when attending lectures at this college for any post graduate examination. They attend regularly the few lectures we can provide for them. Our own graduates are allowed to attend our M.A. lectures without paying any fee.

Question 9.—No special measures. The students are generally polite and well-behaved. Any student guilty of rudeness or appearing improperly dressed would be rebuked or reported to the Principal by any professor who saw him. Rarely scuffles take place and are punished by fines. No special measures are required to promote cleanliness. Lavatories are provided for the use of students.

Question 10.—No steps are taken to foster the habits of truthfulness, except by rebuking students who tell lies and punishing those who are convicted of cribbing in examinations.

Question 11.—Students guilty of mean or dishonourable conduct are to some extent condemned by public opinion. New ideals of conduct are formed at college. But the popular code is not strict and divergence is not severely punished by the social sanction.

Question 12.—The principal punishable offences are cribbing at examinations, abusive language, violence, dishonesty and irregularity in attendance at lectures. For small offences fines, not impositions, are inflicted. Heavier fines are also inflicted for grave offences. In extreme cases rustication or expulsion may be resorted to.

Question 13.—Abstracts and annotated editions of text-books are largely employed, especially in history and languages.

Question 14.—The books themselves are read through in lectures and students are exhorted to read before lectures the portions of the text-books on which they are to be lectured. Our college examinations also encourage, I hope, the rational study of text-books.

(2) HOSTELS AND HEALTH.

Question 1.—Rooms in the hostel are provided for 75 students. The other students live with their parents or make their own arrangements for lodgings.

Question 2.—There is a native superintendent to supervise the 75 students in the hostel. He is a whole-time man. The hostel is situated in a good neighbourhood.

Question 3—(a) The superintendent often inquires about the food-supplies and always settles the matter in case of dispute. For food purposes, resident students divide themselves into several clubs, about a dozen members in each, who manage their own affairs through secretaries elected monthly. The superintendent always helps them in securing good food.

(b) The college gymkhana provides plenty of physical exercise and recreation.

(c) The Superintendent is always among them and the students have every opportunity of following the good example that he takes care to set them. He punishes minor offences by fines and reports grave offences to the Principal.

Question 4.—The Superintendent is a B. A. of Bombay and, before he was given the post, had some experience of school discipline. He is a Guzerathi Hindu and thus well able to understand the wants of the resident students, most of whom come from that part of the country.

Question 5—Cricket, tennis, football, hockey, etc., are favourite out-door games; none compulsory. We have at present no gymkhana. Sandow's exercises are not gone through by our students.

Question 6.—The hostel is for medical purposes in charge of the Presidency Surgeon, who visits the hostel at intervals and advises us what to do in case of sudden illness or epidemics.

Question 7.—When small pox is prevalent, we recommend vaccination. Sometime ago when small-pox was raging in Bombay; I had a calf brought to the college, and myself, my family and most of the professors were vaccinated. A large number of students followed the example. Every facility is afforded for vaccination in Bombay.

Question 8.—No special measures are taken to preserve the eyesight of students. Our building was not originally meant for a college and the arrangement of light in the lecture-rooms is haphazard. Most of the lecture-rooms are fairly well ventilated, but not in the latest scientific principles. The benches have backs. The reading desks are so constructed that the students are not cramped over their books when they sit at lecture.

Question 9—No measures are taken to counteract consumptive tendencies.

(3) INFLUENCE.

Question 1.—Our classes are of all numbers from over a hundred down to three or four in certain voluntary subjects. As we have only nine professors for over three hundred students, it is impossible to pay much individual attention to scholars. They have to be taught collectively. Some students come separately to consult us about special difficulties of their own. But we cannot venture to encourage the practice. If we did so, we should have to work 24 hours a day. The truth is, we want a larger staff badly, and I believe the same want is felt by all Indian colleges.

Question 2.—The average student confines himself to his text-books. The selection of books provided in the library guides him in his choice of books. Professors often recommend good books in the course of their lectures and students come to them frequently for advice on this subject.

Question 3.—Not out of school-hours, unless they require anything very urgently. Each professor has a room in the college in which he can and does receive and talk to pupils privately.

Question 4.—The gymkhana affords such opportunities. Professors and pupils consult together in gymkhana committee meetings and as spectators and participators in games. We also have a few social meetings at which past and present students meet. I myself used to make a practice of having walks with students which give opportunities of consultation on all manner of topics.

Question 5.—Professors sometimes visit the hostel, but our guidance of their studies is given at the college. The fellows residing at the hostel give help and advice to junior students

Question 6.—Professors of different colleges meet and exchange views at the meetings of the senate and syndicate, at the University examinations and at educational parties. Such interchange of views is desirable and to a large extent obtained by the above opportunities, especially among the Bombay City colleges. I do not know what steps can be taken to give the up-country colleges a better opportunity of expressing their views. They are of course consulted by the syndicate on all important educational questions.

Question 7.—I do not think there is any pressing need for such a council which would be too professorial to make a good selection of examiners. Each member would be inclined to try to secure examinerships for members of his own college staff.

Question 8.—Something has been done in this direction by the University Commission. The Bombay colleges are bound by their local position to have a preponderant influence in University council. In November at the time of examinations many up country professors come to Bombay. If any such council, as is suggested in (7), should be instituted, this would be the best time for it to meet.

(4) MATRICULATION.

I am quite satisfied with our present matriculation examination. It is framed in such a way as to exclude those who are unfit for University work. Such being the case, I do not see why the fact that it supplies a test of a certain amount of proficiency for those who wish to begin life without going to college should be considered an objection. It fulfils a useful double function, and, as such, is a popular examination, which thus is useful in a third way as contributing largely to the finances of the University. There would be far less uniformity of standard if the colleges undertook the matriculation examination.

BOMBAY ;
The 18th March 1902. }

M. MACMILLAN, *Principal*,

Elphinstone College.

10. WILSON COLLEGE, BOMBAY.

(1) DISCIPLINE.

Terminal examinations are held in April for all classes. In September terminal examinations are held for the junior B.A. class and preliminary examinations (to determine who shall attend the University examinations) are held for the previous intermediate and senior B.A. classes.

Other examinations are occasional and dependent on the will of individual professors. In practical work (chemistry) the professor has a full knowledge of what is done.

3. It has not been found necessary to deal with third-year students for shirking work. In recent years these have taken advantage largely of the concession regarding attendance due to plague, but in the second term they are as regular in attendance as the others. If they neglect work, they must suffer in the final examinations.

Students of the first year in Bombay work with examinations in view.

4. Cases of absence without leave (except from sickness) are very rare and there is no fixed penalty. The evil is practically unknown here.

Students must attend each term 60 days as required by the University. Full attendance means about 80 days in the first term and 90 days in the second.

5. No. There are no private candidates in the post matriculation examinations.

6. Nothing beyond verbal reproof is required.

7. Essays (in composition) for all students; and exercises varying according to the subject, as problems in mathematics, science and logic, exercises in rhetoric and style.

The home written work is not 'much,' as there is not a sufficient staff of assistant professors. And in large classes it is difficult to secure general punctual performance. Our 'suasion' is purely moral. Home study is to some extent tested by *oral examining in class*.

8. Fees are Rs. 6 per mensem (or Rs. 36 each term). The fee is uniform and there are no extra fees. The M.A. candidates do not pay fees, although there is usually a regular class for at least part of their work.

Defaulters are not sent up to the University examinations unless they have paid their fees before the form is signed.

9 & 10. In the college the Christian Scriptures are taught and the whole of Christian ethics inculcated.

11. Students acquire a distinct sense of honour, though perhaps they have not a special 'code.' Breach thereof would be strongly disapproved by other students, but not formally dealt with unless it were connected with the work of any special club or society.

12. The only method of punishment apart from moral censure is that of fines, very rarely exercised. For grave misconduct students would be required to leave the college. Practically very little of given discipline is here required.

13 & 14. Aids to study are numerous, especially in languages, history, logic. In some subjects as mathematics and French private tutors are engaged. Students do not rely entirely on any such aid; and in the classrooms the entire work prescribed for each class is fully taught, the method of *vivâ voce* examination being to some extent combined with that of formal lecturing.

(2) HOSTELS AND HEALTH.

1. Those in college quarters are under the control of the Principal, the constant supervision being exercised by a Dakshina fellow, a sort of assistant professor, a Hindu. Dakshina fellows are distinguished graduates, receiving pay from funds at the disposal of Government. This supervision may be the whole or part of the work assigned to one of these.

The surrounding houses are highly respectable; and I am not aware of any boarding houses that are in objectionable situations.

2 (a) The students divide themselves into clubs according to caste or race and arrange for their food.

(b), (c) The supervisor must at once report to the Principal anything questionable in the conduct of a student or students.

3. The most suitable of the Dakshina fellows is chosen; the one most likely to know the students and to be regarded with respect.

4. Lawn tennis and cricket; also less regularly football and Badminton.

We have not made games compulsory. There is no scientific teaching of athletic exercises in connection with the college work.

Some students belong to cricket tennis clubs that are not connected with the college.

We have not been able to obtain sufficient ground as yet.

5. Medical attendance can be always had within a few minutes. We have had little of illness except from malarial fever. The only epidemic that has affected our attendance is the plague. In the case any that are in a state of panic are allowed to go to the country.

6. Vaccination would be urged if there were an epidemic of small-pox. In the case of plague-inoculation a medical officer from Dr. Haffkine's laboratory has been repeatedly in attendance with little result.

7. The benches and desks are carefully constructed. The former have backs and all are on approved patterns. There is abundance of light and air.

Charge of the protection of the eyesight is not undertaken by the professors. Many students wear spectacles.

8. Cases of consumption are rare. I do not know of the professors have been the first discoverers of any. Students so suffering are advised to go to their homes, or are permitted to join provincial colleges where the climatic conditions may be supposed to be more favourable.

(3) INFLUENCE.

The number of students in a class varies from 3 to 140 (and may to a still greater extent). All classes are broken into sections for second language and for voluntary subjects. The lecturer to a class changes every hour and a professor may go from a class of 100 to a class of 10. The smallest classes are such as Latin and optional mathematics.

In small classes the professor knows the students better, but the fact does not in a college carry with it the advantages that it would in a school. Students win success, not through compulsion, but by depending on their own resources.

2. Yes, to a limited extent, especially to aid in writing essays, whether as college exercises or for literary societies and kindred objects.

The majority have no desire to read what does not bear on their work. Individuals read on subjects that interest them—political, social, religious, literary, etc.

3. Students have access to their professors at any time in their houses, or in the college buildings, but there is no room set apart for the purpose indicated.

4. At meetings of literary society or occasional social evenings, or on the cricket ground, or the professor may visit residential quarters.

5. The resident quarters attached to the college are constantly visited. Guidance in study is not usually given outside college hours.

6. Not directly. All colleges teach the same curriculum. Professors to some extent meet as examiners and learn one another's methods. It would be difficult to establish "interchange of thought and influence." The establishment of an inter-collegiate magazine might have this effect. Text-books written by Professor's aid. Occasionally a professor of one college delivers a public lecture in another.

7. Such an inter-collegiate council might be very useful for general administrative ends. It would not effect "interchange of thought and influence" as most of the "thinkers" would not be members of it. For such an end at least half the professors should be members.

It might beneficially recommend examiners.

8. Special courses of lectures such as the "Wilson Philological" lectures might be delivered in all or most of the colleges.

A review or magazine.

(4) MATRICULATION.

The matriculation examination should be maintained. To abolish it would lead to unknown evils; it would also lessen the position of the University (as distinct from the colleges).

The examination should be confined to those intending a University course; and the character of the examination should correspond thereto.

The examination should not be limited to three subjects. One subject is sufficient as a test of ability. But it is essential that the student be prepared to enter on the collegiate course, and this he will not be unless he has to prepare for a testing examination. Students in India, as a rule, study only what is

prescribed for examination. The matriculation examination must include elementary mathematics (algebra and euclid) and should include elementary science.

R. SCOTT,
Acting Principal, Wilson College, Bombay.

II. GRANT MEDICAL COLLEGE, BOMBAY.

(1) DISCIPLINE

- 1.
 2. Terminal examinations are held.
 3. We refuse to sign them up for appearing at the University examinations.
 4. The same as No. 3 above. Over 20 per cent.
 5. No.
 6. The roll-call is taken at the commencement of each class, and those that are not present at the time are marked *absent*.
 - 7.
 8. Rs. 72 for a term of six months. Yes. Uniform charge for all the five years. No extra fee is charged.
- Fees are generally recovered in advance. No student is permitted to appear at his next University examination unless he has paid his fees in full. Medical graduates do pay fees when preparing for higher examination and attend regularly for chemical instruction.
9. Moral certificates for University examinations are refused.
Any student found unclean is sent away from class and marked absent.
 10. Same as No. 9 above.
 11. I think so to some extent.
 12. Absence from class or lecture, misconduct and disobedience. Refusal to sign certificates for University examinations, etc., rustication and expulsion.
 13. Discouraged as much as possible, but they are used by some students for their final examination.
 14. The practical method of teaching in the different classes.

(2) HOSTELS AND HEALTH.

- 1, 2, 3 & 4. Wherever they can get lodgings near the college. There are very inferior quarters in the compound of the college for only 15 students; they are under the supervision of the Principal.
5. Cricket and tennis. There are some gymnastic games also.
6. We have new wards, specially for the students, which have been recently built.
- 7.
8. Advising when necessary the use of suitable glasses. Yes. Yes. We have benches, etc., both with and without backs.
- 9.

(3) INFLUENCE.

1. 105 scholars in each class.
174 scholars in each lecture.
268 maximum number for a lecturer.
- 2.
3. Yes. There is one room for all professors.

4 & 5.

6 & 7. This is the only medical college in the Presidency; but I do not see why all affiliated colleges should not unite for the purpose of interchange of the kind.

8. The establishment of social and athletic clubs on the University system.

(4) MATRICULATION

I think it is better to leave this to the University. There would be certainly variations of standards if the colleges examine independently. Such a course would tend to break up the University system.

H. P. DIMMOCK, M.D.,

Lieutenant-Colonel, I.M.S.,

Acting Principal, Grant Medical College.

12. ST. XAVIER'S COLLEGE, BOMBAY.

(1) DISCIPLINE.

1 & 2. Besides the terminal examinations we have bi-weekly exercises in composition and the professors generally test the progress of their students by oral repetitions.

3. All the terminal examinations are considered to form part of the "preliminary examination" and students who are shown from the results of these examinations to have persistently shirked their work are not sent up for the University examinations.

4, 5 & 6. Our University requires 60 days (about 75 per cent.) attendance at a college for keeping a term and not even the syndicate has the power to excuse a single day's attendance below the required minimum. Private candidates are not admitted at all except in very rare cases by special grace of the senate. During the last year the plague has unfortunately greatly interfered with the regular attendance of students, as the University was barred to excuse short attendance during the first term when the plague is generally at its worst.

7. The amount of work to be gone through in each year is so heavy that it is found impossible to exact regular home-work from students in addition to the regular exercises in composition.

8. The fees charged in our college are Rs. 48 per term; they are the same for all classes. In addition, students have to pay an entrance fee of Rs. 10 on first joining the college, principally in order to check capricious migration from other colleges. No extra fees are charged for laboratory work. Defaulters are not sent up for the University examinations. Graduates who read for the M.A. examination are not charged any fees except those who join from other colleges, who are charged the ordinary fees; they do attend regular lectures and laboratory work.

9 & 10. Good manners, cleanliness and truthfulness are encouraged through free and constant intercourse between students and professors which greatly facilitates personal admonition. Dishonesty in examinations is punished by rustication and in aggravated cases by dismissal from the college.

11. Difference of race and religion very much retards the development of a code of honour and limits its scope. There is little touch between the different sections even after several years of college-life, and each section has its own peculiarities about honour resulting more from custom and early training than from any sense of collegiate *esprit de corps*.

12. There are no recognised punishable offences in our college and no fines or other punishments are inflicted beyond, in rare cases, a reprimand from the Principal, and we have no difficulty whatever in maintaining a strict discipline without any such punishments. Indian students are very tractable and amenable

to discipline : a kind word generally sets them right. In case a student should prove impervious to admonition, he would be asked to leave the college, as insubordination is, according to our rules, a sufficient reason for the dismissal of a student.

13 & 14. Cribs and similar impediments to sound learning are very numerous ; at the beginning of the year and again a few months before the University examinations my paper-basket is generally full of advertisements and specimen pages of cribs of the worst kind ; the most objectionable among them are the annotated editions of English classics. There is a strong tendency among fresh men, less so in the higher classes, to make the memory serve for all the faculties. Much can be done and is done to counteract this tendency by private and public instruction and direction, but the principal remedy lies with the examiners ; it is difficult to convince students of the uselessness of cribs and other *aides memoire* if they find them after all useful for passing the examinations.

(2) HOSTELS AND HEALTH.

1. The majority of our students are from Bombay and live with their families in the town. There is no hostel in connexion with the college, and from its position I am afraid there is scarcely any hope of acquiring one unless Government comes to our assistance.

5. We have a tennis court, cricket pitches and a ground for football. No games are compulsory. Many of our students are members of the Sir D. M. Petit Gymnasium in the immediate vicinity of the college.

6. The sanitary arrangements in the college are very good. Since the outbreak of plague in Bombay the University has excused short attendance during the first term and many students, especially from out-stations, avail themselves of the indulgence and leave Bombay towards the end of the term.

7. Vaccination is not insisted upon, but from time to time especially during epidemics opportunity is given to the students to be vaccinated on the college premises.

8. The light and ventilation of our lecture rooms leave nothing to be desired. The desks are comfortable and the benches are provided with backs.

9. I know of only one such case ; the student accepted my advice and discontinued his studies.

(3) INFLUENCE.

1. The number of students in the different classes varies considerably ; the professors who lecture on subjects which are equally obligatory on all students (English, mathematics, etc.) have to deal with larger classes than, *e.g.*, the professors of the second languages and the groups in the B.A. class, and the amount of individual attention which each student gets from his teacher varies of course inversely as the number of students. Too much "individual attention" is however strongly to be deprecated ; it forms an essential part of an University education to teach the students to use their own brains instead of having recourse to their teacher for every trifle. The maximum number of students in one class is at present 127.

2. I do not think that more than about one-fourth of our students do much of private reading ; they complain not without reason that our courses of study are so heavy that there is no time left for it.

3 & 4. All the European professors live in the college and the students have on all days and at all times free access to them ; no other opportunities are required.

6, 7 & 8. There is at present no such interchange between the different colleges ; each college is a separate, isolated unit. The main reason of this undesirable state of things is, in my opinion, the faulty constitution of our University in which the colleges as such have no *locus standi*. The senate is a heterogeneous assembly of members appointed often without any regard to their educational qualifications. The colleges are only the drudges of the University without any

voice in its management and consequently without any responsibility for its shortcomings. If the colleges had a preponderating influence in the management and a decisive voice in the deliberations, they would naturally be drawn closer together and a necessary consequence of a greater responsibility would be a greater interest in University affairs. A very considerable obstacle to inter-collegiate communication are the travelling expenses.

(4) MATRICULATION.

All my colleagues and I are strongly opposed to the abolition of the matriculation examination, and we are fully convinced that the effect of such a retrograde step will be nothing but confusion. The Universities and Colleges of Oxford and Cambridge have nothing in common with our Universities and colleges except the name; in all other respects they are essentially different; the London University, the only one with which our universities can be compared, has wisely kept its matriculation. If it is difficult to secure uniformity of standard in one examination, it will not be made easier by substituting a dozen or more different examinations for one. The proposal of letting the university charge a certain fee from candidates for the privilege of being examined by the colleges is ingenious, but scarcely fair: the colleges will have to do the work and the university pockets the fees, which appears a very unequal division of labour. The privileges of an undergraduate of Oxford and Cambridge may be worth Rs. 10 or more, but I am unable to discover any privileges of our undergraduates for which a reasonable man might be willing to pay Rs. 10.

The alternative proposal, to confine the matriculation examination to those who really wish to take up a university course, is an eminently practical one and will, if adopted, be a great gain to the university and to the colleges. To the proposed subjects I should like to add "(4) history" and instead of "(3) arithmetic" I would substitute "mathematics," as algebra and euclid or better "geometry" are far more useful for the subsequent college course than arithmetic.

As an additional means to secure the same object, I would propose to raise the matriculation fees considerably, say, to double the present amount and to reserve one-half of the fees of the successful candidates as part-payment of the previous examination. This would at the same time go a long way to rid the examination of the superfluous ballast of totally unfit candidates who constitute at present the great majority of the examinees.

सत्यमेव जयते

F. DRECKMANN,
Principal, St. Xavier's College, Bombay.

13. BARODA COLLEGE.

(1) DISCIPLINE.

1. All professors are required to see that the proper proportion of the prescribed University course is gone through each term. The quality of the work is tested by the terminal examinations and also by the exercise work.

2. A written examination is held at the end of each term.

3. Students who have persistently neglected their work are not allowed to appear at the University examinations.

4. Each student has to keep 60 days every term, and unless he keeps these days by attending the lectures, he is not allowed to appear at the University examinations.

5. There are no "private candidates" for any University examination higher than Matriculation.

6. There is little or no trouble in this respect. As a rule, our students are punctual and regular.

7. On an average three or four exercises per week are expected to be done by the students. Reports are submitted by professors at the end of every term and steps are then taken for reproofing those students who have not acquitted themselves satisfactorily. In bad cases a student would not be granted a certificate to appear at the next University examination.

8. (a) Rs. 20 per term for the previous and 1st L.L.B. classes. Rs. 25 for the others. These fees are, however, too small and will be raised within a short time.

(b) No extra fees are charged for laboratory work.

(c) After a certain date students who have not paid their fees are suspended.

(d) There are no regular lectures for any examination higher than the M.A.

9. The Principal and professors give advice in the classes about good manners; also about cleanliness.

10. By means of general advice from Principal and professors.

11. There is a code of honour to a certain extent among the students, for when anyone of them is known to be untruthful or of bad character the others shun him until he begins to show amendment. But there are really no thoroughly bad students in residence, because such are got rid of as soon as possible.

12. (1) Writing upon the walls of the building.

(2) Creating a disturbance or causing annoyance to fellow-students.

(3) Neglect of work and minor offences.

The punishments are.

(1) Imposition to a slight extent.

(2) Fines.

(3) Suspension.

(4) Refusal to grant the certificates required by the University.

(5) Dismissal.

13. Nearly all the text-books prescribed by the University have been extensively annotated and the students buy these annotated editions and read them carefully. This is especially the case with English literature, Sanskrit and history. The mischief, however, prevails most in the junior classes.

14. Students are warned against learning notes by heart, and in framing the college examination papers some care is exerted to discount the disadvantages that are supposed to result from such mere efforts of memory.

But the system of trusting to notes either from professors or books does undoubtedly prevail to a considerable extent. The evil would be remedied in a great degree if the University were to make a rule that professors were not to be appointed examiners in the subjects on which they had been previously lecturing.

(2) HOSTELS AND HEALTH.

1. At present we have 77 students (out of 200) living in boarding houses in the college compounds. The others find private lodgings in the city. Financial considerations during the past three years of scarcity have prevented any addition to the number of boarding houses, but of course these will gradually be increased as circumstances permit. There is no doubt that in every way it is desirable that all college students should reside in these hostels.

2. (a) A general supervision is exercised by the Principal who visits the boarding houses at regular intervals. But in addition there is a managing committee consisting of one of the professors, one of the fellows and one of the office clerks. The two latter reside in the boarding houses.

(b) These hostels are in the extensive college compound far away from any surrounding influences due to ordinary dwelling houses.

3. The resident supervisors see that discipline is maintained in the boarding house; that a roll-call is properly called every night at 9 o'clock, and that the

moral conduct of the students is good. The gymnasium, cricket ground and tennis courts being adjacent to the hostels, these students have every opportunity of enjoying physical exercise. They are all advised to take plenty of recreation and nearly all of them do so in one way or another.

4. The fellow being a graduate is quite capable of assisting the students in their studies, and this he does by giving them very welcome advice.

5. Cricket, lawn tennis, football and gymnastics. These are not compulsory, but all have to pay a fixed sum every term for the support of these games.

6. The doctors from the State hospital attend the students when called for ; otherwise those who are unwell go to one of the State dispensaries, or in severe cases to the hospital. In the case of an epidemic like plague breaking out, it would be necessary to close the hostels, but nothing of this sort has ever happened.

7. No. My information is that nearly all students have been vaccinated.

8. (a) No special attention has been paid to the eyesight of the students.

(b) The arrangements as regards light and ventilation in the college and the boarding houses have been carefully attended to and there is no complaint in this respect.

(c) In most of the classes the benches have backs provided.

9. No active measures are taken.

(3) INFLUENCE.

1. The numbers vary very much, the average in the previous class being about 80 to 90, the intermediate class about 45, the junior B.A. class about 35, the senior B.A. class about 30, the intermediate science class about 3, the B.Sc. class about 2 and the law class about 20.

The number of professors engaged in lecturing to these students is 10. Moreover, there are two fellows who give a little assistance.

2. The best students read a considerable number of books. They are guided in their choice by the professors.

3. The Principal and the two senior professors have separate rooms. The others have a room in common. Students can see their teachers whenever the latter are not engaged in lecturing.

4. Professors and students meet in various ways ; for example, at the meetings of the debating society, and more especially at the time of the annual social gathering.

5. This question has already been answered.

6, 7 & 8. There is no interchange of thought and influence between this college and others, except in this way, that professors often meet during vacation time and talk informally about points of interest. Meetings of college representatives once a year for the purpose of discussing inter-collegiate matters would be an innovation highly to be welcomed. Much benefit would, I feel assured, result if this suggestion were carried into effect.

(4) MATRICULATION.

(a) I would strongly deprecate any change in the present system of making the passing of the matriculation a *sine qua non* for entrance to a college. And this examination should continue to be held by the University. The circumstances in India are such that if the colleges were granted this power of examination and admission, our junior classes would be crowded even far more than they are at present with weak and immature students.

(b) For those students who do not wish to join a college, a school final examination with a wider scope than matriculation might be instituted as is the case in the Bombay University. This examination should, however, be considered to a greater extent than now prevails as a test for admission to Government service. Otherwise it will be a failure.

- (c) I do not approve of any reduction in the number of subjects to be studied for the matriculation examination of the University of Bombay.

T. S. TAIT, M.A., B.S.C.,
Principal.



CALCUTTA.

14. PRESIDENCY COLLEGE, CALCUTTA.

(1) DISCIPLINE.

1. In order to test the quantity and quality of work done in the junior F.A. and junior B.A. classes, annual examinations are held in the 1st and 3rd year college classes.

2. Only annual examinations are held in the 1st and 3rd year college classes and annual test examinations in the 2nd and 4th year college classes.

3. Those students who persistently shirk their work during the 1st or 3rd year of their college course are not promoted to the next higher classes, *vis.*, the 2nd and 4th year classes, respectively, if they fail in the college annual examinations.

4. (a) Absence from class without leave is punished in the case of scholars with deduction of scholarships during the period of absence.

(b) Both scholars and non-scholars are punished by being marked absent and so being made to lose their percentage of attendance for the period of absence.

(c) Under graduates are excluded from appearing at the F.A. and B.A. examinations of the Calcutta University if they fail to attend 56 per cent. of the lectures delivered in the college classes during two accademical years in each of the subjects in which they are to be examined.

5. An under graduate thus excluded from appearing at the University examinations is not permitted to appear as a "private candidate." No private candidates (except females) are allowed to appear at the F.A. or B.A. Examinations of the Calcutta University.

6. Class registers are called by the professors at the commencement of each lecture and, if the students fail to attend their classes punctually at the beginning of the lecture, they are marked absent, and they thus *pro tanto* lose their percentage of attendance.

7. Home work is not generally given out to under graduates.

8. The following is the scale of fees fixed for this college :—

(a) Rs. 12 a month is charged from all students reading in this college, exceptions being made in the following cases only.

(b) Scholars reading in the 1st and 2nd year (F.A.) classes pay at the rate of Rs. 10 a month.

(c) Mahomedan students of this college pay in all the classes at the rate of Rs. 4 a month. The balance, *vis.*, Rs. 8, is met from the Moshin fund.

(d) Students of the Sanskrit college reading in the 3rd, 4th and 5th year college classes pay at the rate of Rs. 6 a month.

(e) Besides the monthly tuition fees stated above, there is an admission fee of Rs. 10 which is uniformly realised from all students at the time of their first admission.

The fee for all the classes is uniform with the exceptions stated above.

No extra fee is charged for laboratory work, but the students who work in the laboratories have to make a special money deposit for handling the apparatus, etc. If they cause any damage to instruments or apparatus, the cost of such damage is deducted from their deposits.

Students are fined from annas eight to Rs. 2 a month, if they fail to pay their dues on the fixed dates. The names of defaulters are struck off the rolls of the college on the last day of every month and a re-admission fee of Rs. 10 is charged if they join again subsequently. Graduates in the pass degree pay the usual monthly tuition fee of Rs. 12 when preparing for higher examination. It is presumed that the expression "higher examination" denotes the M.A. examination of the Calcutta University.

Graduates preparing for the higher or M.A. examination attend regular lectures delivered to classes and practical demonstrations carried on in the laboratories.

9. Students guilty of bad manners are rebuked and, if necessary, punished.

It is not necessary in this college to offer any special encouragement for ensuring cleanliness, as the students attending the college are mostly sons of well-to-do people and are almost always cleanly in their habits.

10. Truthfulness in students is encouraged by mitigating the punishment of offenders, if they admit their fault; whereas offenders, who try to suppress their fault, are rebuked and punished more severely.

11. It cannot, I think, be said that the discipline enforced in this college has led to the development of a code of honour among the majority of the students. It is only a small University who seem to be guided by such a sense of honour and those who are guilty of a breach of discipline seem generally to have the passive sympathy of the majority.

12. The following are recognized punishable offences in this college :—

- (a) Making a noise in class.
- (b) Annoying or disturbing a professor.
- (c) Loitering in the verandahs during lecture hours.
- (d) Any disorderly conduct on the part of the students.
- (e) Taking any book or note-book into the examination hall during the annual or test examinations, or otherwise using any unfair means during such examinations.
- (f) Disobedience to orders of the Principal or any infringement of the college rules or other breaches of discipline.
- (g) Any immoral conduct.
- (h) Assaulting any servant of the college.
- (i) Eating or chewing in class.
- (j) Any damage done to the college building or property or plucking any of the college plants.
- (k) Impertinent or disrespectful behaviour or any objectionable language to any of the professors.
- (l) Answering the roll-call of another student while he is absent.
- (m) Tampering with any official document.
- (n) Inattention or neglect of study, when reported by the professors.

The punishments inflicted are as follows :—

Warning, fines, suspension from attending class lectures, rustication or expulsion.

Impositions are not resorted to. Fines are imposed. Money fines varying from Re 1 to Rs. 15 according to the nature of the offence are imposed.

13. Printed notes and abstracts, especially those by native editors, are commonly made use of by the undergraduates. In English, philosophy, Sanskrit and history these keys or summaries are, I believe, mostly used. Such notes are I believe often committed to memory by students with a view to passing the F.A. and B.A. examinations.

14. The text-books are systematically gone through and taught in the different classes, and the syllabuses lectured upon, while the students who take up science are required to do practical work in the college laboratories. Printed notes are, I believe, regarded by the students as a help in answering the kind of questions set at the University examinations, and as success in these examinations is the principal, if not the only, object of their studies, attempts to discourage the use of keys and abstracts generally prove futile.

(2) HOSTELS AND HEALTH.

Under graduates of this college are required to live either with their parents or *bonâ fide* guardians, or in licensed messes or boarding houses or in the Eden Hindu Hostel, which is a Government institution attached to this college.

2. The Eden Hindu Hostel is directly under the control of the Principal of the Presidency College. There is one Superintendent and one Joint Superintendent, both of whom are natives. They are residents in the hostel and are whole-time men. Besides the two Superintendents there are in the hostel five prefects, usually graduates of the Calcutta University and senior boarders, for the five wards, into which the hostel is divided, who are appointed by the Principal of the Presidency College, with a view to preserve discipline and tidiness in each ward. About 50 inmates of the Eden Hostel fall under the control of each prefect, while the Superintendent and Joint Superintendent exercise control and supervision over the whole body of boarders. Serious cases of misconduct and such cases as cannot be dealt with by the Superintendent are reported to the Principal for his decision. There is also a board of visitors consisting of eleven members, of which the Principal of the Presidency College is *ex-officio* President. Members of the board visit and inspect the hostel from time to time. The hostel is surrounded on the south by the buildings for the students of the military class of the medical college, on the north and east by low class *bustee* people and on the west by houses of the better classes.

3. The boarders are under the direct supervision of the Superintendent ; he sees that the rules of the hostel (a copy inclosed) are strictly enforced—

- (a) The Superintendent and the Joint Superintendent inspect the food provided for the boarders to see that it is sound and unadulterated. There is also a mess committee composed of five senior boarders who arrange for the daily meals in consultation with the Joint Superintendent and the medical officer of the hostel.
- (b) Physical exercise and recreation are taken in the compound of the hostel in the afternoon, and the Superintendent generally watches the movements of the boarders during that time. There is also an athletic club in connection with the hostel, having a secretary chosen by the boarders.
- (c) It is the duty of the Superintendent to see that all the rules of the hostel, which have been framed to promote the moral welfare of the boarders, are strictly enforced. Boarders are not allowed to go out of the hostel after 9. P.M. without the written permission of the Superintendent previously obtained, and visitors to boarders in the Hostel are allowed only with the permission of the Superintendent, and at such hours as he may prescribe. Other precautions, which are taken, will be found in the rules of the institution.

4. The Superintendent of the Eden Hindu Hostel is an M.A. of the Calcutta University. He was formerly an officer in the Education Department included in the Provincial Educational Service. He was head master in several collegiate schools and has now retired from the service of Government. After his retirement he was appointed to his present post.

The Joint Superintendent was formerly a junior scholarship-holder. He was an officer of the Educational Department, being a member of the old Sub-ordinate Educational Service. He was a teacher in the Sanskrit collegiate school and was appointed to his present post after his retirement from the service.

5. Cricket, football and tennis are the favourite games of the students in the college and in the hostel. Gymnastics are compulsory for the students of the 1st year class of this college. Sandow's and other physical exercises are practised by the students under the supervision of an experienced gymnastic master.

6. By our providing gymnastics and games for them, no special care is taken about the health of the students attending this college, who are allowed to absent themselves in case of sickness, but great care is taken about the health of the students who live in the Eden Hindu Hostel. There is a medical officer connected with the hostel, who daily attends the institution in the morning. In cases of sudden illness the medical officer of the hostel is sent for, but if he is not available, other medical men are called in by the boarders. All cases of serious illness are at once reported to the Principal and information is also sent to the parents, guardians or other nearest relatives of the patient.

Boarders attacked with small-pox or plague are liable to be promptly removed from the hostel. Those attacked with measles, cholera or other infectious disease are entirely segregated from the rest by being removed to the hospital attached to the hostel.

7. During the prevalence of small-pox students have recourse to vaccination of their own accord. Moreover, in Calcutta the municipal authorities, I believe, take stringent measures to ensure vaccination or re-vaccination, especially at the time of epidemics. Last year, when one boarder of the Eden Hindu Hostel was attacked with small-pox, he was removed to a private house, and about 50 boarders of the Eden Hindu Hostel were then vaccinated of their own accord. Practically speaking, vaccination has, I believe, become so familiar, especially among the educated classes, that little in the way of encouragement is necessary to promote it.

8. No special care is betowed on the preservation and protection of the eyesight of the students of this college beyond providing well-lighted rooms for them. The college lectures cease before twilight. In January 1901 Mr. R. Iyengar, an oculist of the Mysore Raj Government, came to this college, and I permitted him to examine the eyesight of the college students.

The writing desks of this college are not constructed on any special hygienic principle.

The arrangement of light and ventilation in this college and in the hostel attached to it is satisfactory. The Public Works Department of the Government of Bengal is the authority in such matters. Plans of all new constructions on the college premises are prepared by them in consultation with the Principal of the college. Benches without backs are used in this college.

9. If the guardians of students, who betray a consumptive tendency, fail to detect such disease in their wards in their homes during the holidays or in term time, it is hardly possible for the Principal or professors to detect it in the college. Generally speaking, nothing is done by the college authorities in such matters. In the hostel of course the medical officer attends to such cases. Speaking generally, I should say that the outward appearances of the students of this college and of the boarders of the Eden Hindu Hostel betrays no signs of consumptive tendency; they almost invariably look healthy and in good spirits.

(3) INFLUENCE.

1. The average number of students in each class or section of a class is about 85, exclusive of the M.A. classes, in which the numbers are much smaller.

The average number of pupils (exclusive of M.A.) to each lecturer is 85.

It is not possible for the professors to bestow much individual attention upon the students. The maximum number of pupils to any lecturer is 99, or including 13 B. Sc. students with the B.A. (B) students in.

2. Some lectures, 112. (2) Many of the students do private reading outside their text-books. They read books in the college library. Students are also permitted to take out books from the library on making a deposit of Rs. 10. Choice of books to be read is made by the class professors in cases where they are consulted by the pupils.

3. Yes; the scholars have access to their teachers out of school hours. Some of the professors have rooms of their own in the college, where they can receive and talk to pupils privately. In this college there are not sufficient rooms to allot one room to each professor for such purposes.

4. During athletic sports theoretical performances and meetings of debating clubs, etc., at the college opportunities are afforded to pupils and teachers to come together. I should say that ordinarily professors are not much in touch with the students out of college hours.

5. Yes; there is the Government Eden Hindu Hostel in connection with this college provided for the student of this college [*vide* answer to question (1) on hostels and health].

The Principal visits the hostel from time to time. There is a board of visitors composed of eleven members, most of whom are professors of this college, who visit the hostel occasionally. They rather look to the comfort of the boarders, I believe, than attempt to influence them or help and guide them in their studies.

6. There is practically little interchange of thought and influence between colleges distantly situated, but some of the professors and students of different colleges in Calcutta come together at the meetings of the Calcutta University Institute and exchange ideas.

However desirable it may be that there should be interchange of thought and influence between professors and teachers engaged in carrying out the same work at different centres, it is practically impossible to give effect to it, as the several institutions are under different management, are guided by different rules and regulations and obey no single authority.

7. A council like the one suggested having a recognised position might, I think, be formed with advantage and also utilised for selecting and recommending examiners to the University.

8. For the reasons stated in my answer to question 6, I do not think it possible that interchange of thought and influence between colleges distantly situated can be arranged for in any other way than by having a formally constituted council as indicated in my preceding answer.

(4) MATRICULATION.

I should not be in favour of the change suggested in paragraph 1 under this heading.

In view of the present condition of higher education in Bengal, it seems to me that under such a system there would be far less uniformity of standard than there is under the present system, as the result of it would probably be that colleges exacting a high or fairly high standard of matriculation would be practically deserted, while the lower a college reduced its standard the larger would be the number of students attending it and the more prosperous would be its financial condition. Moreover, I doubt whether the authorities of all our different colleges, however well intentioned they might be, would be found qualified to judge of a suitable standard for matriculation. Though the higher examinations of the University might in the long run reduce things to their proper level, I believe that at the outset, however stringent the rules about the preliminary qualifications of candidates might nominally be, the result of such a measure would be to encourage private enterprise based on mercenary motives, whereas Government institutions which maintained their former standard, or a higher one, would greatly decline in prosperity. Even now it frequently happens that a student of the Presidency College failing to obtain promotion to the next higher class, on account of his inability to pass the college annual examination, manages to get admission into a higher class in some other affiliated institution. I see no reason why, if the entrance examination is held twice yearly, as in the London University, and candidates are required to pass the examination in English only first, and only English examiners are appointed for this examination, a sufficient uniformity of standard in English at all events, which seems by far the most important subject, should not be secured. In my opinion higher education as existing at present in this country should be regarded rather as an exotic than as a hardy evergreen, that is likely to be further strengthened or developed by cutting down to the roots. I think such a process is more likely to end in its premature decay or at all events in the permanent stunting of its growth.

This remark, in my opinion, applies almost equally to the proposals contained in paragraph 2. In view of the small number of students (as compared with the population) who at present go in for higher education in this country, it seems to me, on the whole, a safer and sounder course to try to improve the existing system by grafting on the necessary modifications than to detruncate it to the extent suggested.

I think a departmental school final examination in English only might perhaps be introduced with beneficial effect, and I see no objection to a more general departmental examination *alternative* to the entrance examination, but with a

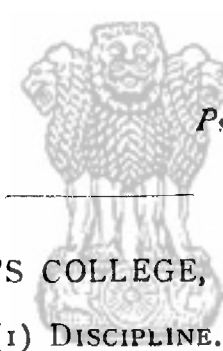
somewhat wider and more practical scope, to be called the school final examination. If, however, candidates who pass this school final examination were admissible as undergraduates of the University to its higher examinations, as I believe is now the case in the University of Allahabad, I am not sure that any useful purpose would be served by the proposal, as the same results might, I think, be obtained by introducing an alternative entrance course in the University of a practical nature.

If, on the other hand, such candidates were not so admissible, it seems to me that among those who had passed the departmental school final examination, there would still be the same crowds, as now, of dissatisfied place-hunters, only more dissatisfied, because they would have no further outlet for their energies or ambitions (as they have now men as undergraduates of the University, they can at all events carry on their studies to a higher level), while from the fact of their having passed a *departmental* examination, Government would be held more directly responsible for their want of employment. I would prefer that all candidates for matriculation should be required to pass in English only first (with a higher standard than now) and that they should then be allowed six months later to complete their matriculation either in the other subjects of a literary course, somewhat similar to the present entrance course, or in an entrance course of a more practical character, which might lead on to alternative courses of a practical nature to be introduced in the higher examinations of the University. I should not be disposed to approve of history and geography being omitted altogether from the matriculation examination. As English is the tool, which is given to our students to do all their educational work with, the pass marks for matriculation in that subject should, in my opinion, be raised to 40 per cent, but, with the minimum of 33 now required in the aggregate, I do not think it necessary to raise the pass marks in other subjects.

CALCUTTA ;
The 28th March 1902.

}

A. C. EDWARDS,
Principal, Presidency College.



15. ST. XAVIER'S COLLEGE, CALCUTTA.

(1) DISCIPLINE.

- 1, 2 & 3. A promotion test at the end of the 1st and 3rd years' classes.
4. The 66 per cent. rule of the University is observed.
5. Not by us.
6. By moral pressure.
7. None. The students find hardly time to revise their subjects.
8. Rs. 6 *per mensem* for all, with an extra fee of Re. 1 for laboratory work. Defaulters, after due warning, are struck off the rolls.
- 9 & 10. Moral influence is used.
12. Offences against discipline, good manners, or morality are punished by reprimands, and, if necessary, by rustication or even expulsion.
13. To an enormous extent in any subject for which key-makers are found.
14. The only step that can be taken is to show by illustrations how valueless these aids (?) are.

(2) HOSTELS AND HEALTH.

1. With their parents, relations, in hostels or students' messes. We have no hostel of our own.
5. Football and cricket are encouraged, but not made compulsory.
8. The arrangement of light and ventilation in our lecture rooms is, I think, quite satisfactory.

(3) INFLUENCE.

1. In the 1st year from 70 to 100; in the 2nd, about 150; in the 3rd, about 40; and about 80 to 90 in the 4th.
2. Very little, although they are provided with a very good library.
3. Yes.
6. No. I fail to see how it could be brought about.
7. I am not convinced that it would be a success.

(4) MATRICULATION.

I am, at present, not prepared to support the suppression of the matriculation examination, and to leave each affiliated college to matriculate for itself. My chief reason is that colleges, where such matriculation is serious, would be at a disadvantage compared with other colleges less scrupulous; the latter would evidently draw off the majority of the intended candidates and leave the former with a mere handful. In India it may take a long course of time for things to find their own level, and time may simply bring on the ruin of the best colleges. If, however, the qualifications required for admission were defined so stringently as to eliminate all possibility of the inconvenience mentioned above, I should be prepared to consider again the suggestion.

The alternative recommends itself more to my support, but there are some objections of which I shall mention only three—

- (1) The case of students changing their mind and wishing to take up a university course after the proposed matriculation has taken place is not foreseen; and yet it is to be expected to occur pretty frequently.
- (2) Again, in unscrupulous schools, candidates may be prepared merely for the three subjects in which it is proposed to examine them, and to be found utterly unfit for the F.A. course, after they have been admitted among the undergraduates.
- (3) The proposed departmental school final examination ought to be one which suits the requirements of both Natives and Europeans, or there must be two such final examinations.

I should like to have these points settled and the objections efficaciously removed before I give my unqualified support to the alternative proposal.

In connection with these proposals I beg to annex an amendment by Father A. Neut, S J., Prefect of Studies in our College.

E. LA FONT,
Rector, St. Xavier's College.

PROPOSED AMENDED SCHEME.

In connection with the proposal to suppress the present matriculation examination, and the alternative proposal, I beg to suggest the adoption of the following scheme, as an amendment, leaving some details to be supplied when required.

One departmental examination to serve as a test for admission into an affiliated college, and as a school final examination, with alternatives, in the latter case, to suit the requirements of the better as well as of the poorer classes of schools, which, for the purpose, are thereafter indicated as *Group A* and *Group B*, respectively. The corresponding certificates granted to successful candidates to be called "1st class certificate," and "2nd class certificate," respectively.

The examination consists of two parts—

Part I comprises two compulsory subjects only, *viz.*, English and arithmetic—

English, i.e., essay, reproduction of a short narrative, and a letter.

Arithmetic, i.e., two papers on the lines of the present high standard examination (European code, Bengal), viz., one testing rapid calculation, the other, more difficult questions.

Not less than 40 *per cent.* to pass in English or in arithmetic.

Those who pass in Part I on payment of rupees five can have their names entered in the list of undergraduates entitled to appear for the higher examinations of the University.

Students so admitted into an affiliated college, if found unfit for the F.A. course, should be reported to the University, that the school in which they have been trained may be warned, and, if necessary; penalized (as is done, at present, in the case of schools showing repeated bad results at the entrance examination), if it is discovered that these schools have confined their teaching to the two subjects mentioned above.

Part II for those who wish to obtain a "leaving certificate." After passing in Part I, they would have to pass, as follows, according to the classification of schools:—

GROUP A.

Comprising the better class of pupils working for a 1st class certificate.

1. English, test-books and grammar.
2. Greek *or* Latin, for boys; French *or* German, for girls.
3. At least two and not more than four other subjects to be chosen among the following: (a) algebra; (b) euclid; (c) history or geography; (d) French; German, or the vernacular of the province (for boys only); (e) physics; (f) domestic economy and needlework (for girls).

To pass in subject 1 the candidate must obtain 40 *per cent.* and 30 *per cent.* in each of the other subjects, with a certain aggregate to be determined.

GROUP B.

Comprising the poorer class of pupils working for a 2nd class certificate.

At least two and not more than four subjects to be chosen from the following:—

(a) History of England and India (outlines); (b) geography of India in detail and outlines of the rest; account-keeping, commercial correspondence and business methods; (d) shorthand and type-writing; (e) vernacular of the province; (f) drawing (for boys); (g) domestic economy and needlework for girls.

- Remarks.*—(1) The examination for Group A. covering almost the same ground, could take the place of the higher standard examination of the European code, Bengal.
- (2) To meet special requirements, the London Chamber of Commerce examinations, or any other English examination at present admitted, would be received in lieu of the final as defined above.
 - (3) It is evidently understood that the "1st class final Examination certificate" would admit to a University course, if a pupil, later on, wishes to take up that course.
 - (4) These leaving certificates, according to their value, would replace the different examinations more or less of the same standard now admitting into the public service.

A. NEUT, S.J.

16. RIPON COLLEGE.

(1) DISCIPLINE.

1. Examinations from time to time.
2. Yes. Monthly examinations.
3. They are marked *absent* when they do not appear in the examinations, which reduces their attendance, a certain percentage of attendance being indispensable for appearing at the F.A. and B.A. examinations.
4. They are marked *absent*. Absence for more than 33 per cent. of lectures.
5. No.
6. By *absent* mark or admonition.
7. No.
8. Rs. 3 to 4 a month as rate. Rs. 3 for F.A. and Rs. 4 for B.A. A deposit of rupees three as a guarantee for compensation for breakage of or damage to instruments. Fined; but fines sometimes excused in consideration of poverty or unavoidable causes of delay.
9. Absence of good manners in relation to a teacher or a fellow student is punished sometimes by absent marks and rarely by fines. Students are rarely found uncleanly.
10. Untruth or lie is punished more or less severely according as it is light or serious.
11. No perceptible result.
12. Misconduct, untruth in most cases, absence from lectures, impertinence, etc. Fines, absent marks, rustication.
13. To a large extent perhaps not known to the professors generally—English and Sanskrit.
14. Practically giving notes by class teachers on which higher value is set by students and giving questions in examination, which cannot be properly answered from the cribs and keys.

(2) HOSTELS AND HEALTH.

1. Some mess together with other students and some live with their parents or guardians and a few in hostels. No.
2. } No hostel is attached to the college.
3. }
4. }
5. Regular gymnastic exercise under the supervision. A gymnastic teacher employed for the purpose. Besides, football matches are sometimes formed by students themselves. No. No.
6. Ordinarily as in all other institutions. In case of sudden illness in college medical aid is immediately given and in case of outbreak of plague or small-pox students, from the infected house, are kept back from attending their classes.
7. Yes; in case of the outbreak of small-pox, when the guardians allow it.
8. Practically none, as possibly the college authorities can do nothing under this head. Keeping bad hours in the night and reading books of very small types are things both beyond the control of the authorities of a school or college.
9. Nothing, as nothing is necessary, for parents very carefully look after these cases.

(3) INFLUENCE.

1. College arts a little above 74. School a little above 33.
Individual attention differs according to the number in the class. No maximum number is fixed.
2. Many students avail of the college library for extra reading; this to a certain extent guides the choice of books.

- 3 Yes, they have. No particular room is set apart for this purpose.
4. Students sometimes come to college for gymnastics after college hours when teachers are sometimes present.
5. None provided by the school authorities, but the messes where the students live are inspected by the Superintendent as to their suitability as required by hostel rules.
6. No organised interchange of thoughts and influence. This is desirable in Calcutta ; the establishment of the University institute may be named as a step towards that object.
7. Yes. I would recommend and would agree to the suggestion of selecting examiners from the council referred to.
8. I would suggest an annual University re-union to last say, for a week.

(4) MATRICULATION.

Yes. I would support the suggestion and would recommend also the hedging in of the latitude given to affiliated colleges.

The alternative proposal seems to me an objectionable except that I would. not agree to the exclusion of history from the subjects necessary for matriculation ; the minimum pass marks may even then be raised in all the four subjects

K. K. BHATTACHARJI, BL..

17. CITY COLLEGE.

(1) DISCIPLINE.

Periodical examinations are held weekly and monthly. Exercises, both oral and written, are also resorted to.

2. Quarterly and annual examinations are regularly held.
 3. They are fined and marked absent. In the case of free-students they are deprived of the privilege of free-ship.
 4. Students who are absent without leave are liable to fine. Those who fall short of 66 per cent. of attendances are according to the University rule excluded from being sent up either to the F.A. or B.A. Examination.
 5. By no means. It is impossible, for the University rule is against it.
 6. By forfeiture of attendances.
 7. Yes. The performance of home-work is enforced in many cases by fine.
 8. Rs. 3 a month for F.A. and Rs. 4 a month for B.A. class students. An extra fee of Rs. 3 a year is charged for laboratory work. Defaulters are generally fined and after due notice their names are struck off the rolls. Graduates preparing for higher examinations pay fees and attend regular lectures. Science students undergo laboratory work.
 9. Discipline is strictly observed. Cleanliness is encouraged by lectures on hygiene.
 10. By moral lectures. Any case of untruthfulness coming to the notice of the teachers or Principal is promptly and adequately punished.
- Yes. The conduct of a guilty boy is often brought to the notice of the teachers by the students themselves.
12. Besides offences against discipline, good manners, and good-conduct, the following are recognised as punishable :—The use or introduction of any intoxicating drug or drink. Chewing of betel, attending theatres, reading bad books, keeping bad company, loitering outside the class.
 13. Probably to a large extent in the languages annotated editions of text-books are generally prescribed by the University and more annotated books are available in those subjects. The teachers make it a point to have the boys well grounded in the text-books.

(2) HOSTELS AND HEALTH.

1. Some undergraduates of our college live in messes and some with their parents or guardians in or outside the town. The college has at present no hostel attached to it.
2. Some licensed messes are visited by Superintendent of our college, who is a native gentleman.
3. General supervision in accordance with the rules for licensed hostels laid down by Government.
4. He is a graduate of the Calcutta University with a long teaching experience.
5. Gymnastic exercises, native games, footballs, cricket, etc., are encouraged under the supervision of teachers. No games are compulsory.
6. In case of sudden illness the sufferer is promptly taken to the Calcutta Fever Hospital which is situated close to the college and placed under proper treatment.
7. As far as I know, our students are all vaccinated, and for this matter the college authorities depend on the guardians.
8. We generally use benches without backs. The arrangement of light and ventilation is of course controlled by hygienic principles.
9. We do not mark any consumptive tendency in our students. Any student, who betrays that tendency, is not allowed to read in the college.

(3) INFLUENCE.

1. The average number of scholars in the fourth year class is about 100, in the third year class about 30, in the second year class about 140 and in the first year class about 80. In the fourth and second year classes about half the number are plucked students who join college at different times and read only for six months. The professors who teach the first and second year classes have each generally to teach all the students of these classes; in the 3rd and 4th year classes the English lecturers have to teach all the students of the classes, the science and mathematical lecturers about two-thirds, philosophy lecturers about half, the lecturers on Sanskrit about one-third, the lectures on history and political economy and Persian and French not more than a dozen. The lecturers pay as far as possible individual attention to the scholars.
2. Yes. We have a library and a reading club. The students are guided by the lecturers and the president of the club in the choice of books.
3. Yes. Some professors have their own rooms, where the students meet them. Students generally visit the professors at their homes and they are free to do so. Periodical meetings of pupils and teachers are held.
5. No hostels.
6. There is an inter-college association through which interchange of thought and influence with some other colleges situated in Calcutta is carried on. The sphere of the association may be extended. It is desirable that there should be such interchange between professors and teachers engaged in carrying out the same work in different centres. In Calcutta a separate house for the conference of the professors may be arranged for. The heads of the education department may help in the matter in town as well as in mufasil places.
7. Yes.
8. The proceedings of the professors' conference may be published and sent to the distant colleges. The representatives of the latter colleges may be invited during long vacations to attend the conference.

(4) MATRICULATION.

In my opinion the present system is better than what is proposed.

J. M. DUTT,
Principal, City College.

18. CALCUTTA MADRASSA.

(1) DISCIPLINE.

Paragraphs (1) 1-14 cannot be answered, as the Madrassa F.A. classes are under the control of the Presidency College authorities.

(2) HOSTELS AND HEALTH.

1. Anywhere most convenient to them. Elliott hostel has been provided, but not exclusively for Madrassa undergraduates.

2. Hostel is under the supervision of a Superintendent and an Assistant Superintendent who are responsible to the Principal of the Madrassa. The two former are on the teaching staff of the Anglo-Persian Department. The Superintendent has 92 boarders under him, and the Assistant Superintendent 36. The surroundings of the hostel *on every side* are pernicious. In its immediate proximity there are brothels. All efforts to have the locality purged have been futile.

3. The supervision is immediate and residential—

(a) Students form their own messes, keep their own cooks. The daily bazar materials are inspected by the Superintendents and the visiting physician.

(b) The hostel grounds admit only of tennis singles. This provision for recreation is inadequate.

(c) The daily moral conduct of boarders is closely observed.

Irregularities are promptly checked.

4. The Superintendent officials are Muhammadans of good birth and education and with considerable experience.

5. Cricket, football and hockey are favoured: but owing to the absence of a sufficiently large play-ground, they cannot be played in the hostel. The grounds are being extended, but not sufficiently. Games are not compulsory, though college students have to subscribe to the athletic fund. Athletic exercises are not employed except by those who elect them. There is no supervision of athletic exercises in the hostel.

6. There is a qualified visiting physician who attends daily. In cases of emergency the hospital is used for patients. But most boarders prefer going home to their relatives when they are seriously ill.

7. Measures have been taken to encourage vaccination. Boarders have been known to seek protection from small-pox, while it has raged in the city, by going to a vaccine depôt, or a vaccine inoculator has attended at the hostel.

8. Gas lamps are used in the hostel. Boarders sit at tables, not desks. The cubicles are well ventilated. Benches of both descriptions are used; each boarder has a chair.

9. We have had no experience of the class described.

(3) INFLUENCE.

These paragraphs do not admit of being answered. Our college students are under the control of the Presidency College authorities. But the acquaintance of the professors with the students and *vice versa* begins in and ends with the class room.

(4) MATRICULATION.

I do not support the proposal. It will operate very unequally, and further disintegrate high school education. It is difficult to understand how pupils of high schools would be disposed of. The entrance examination would suffice for all purposes, if it were so conducted as to pass only those candidates that have a practical knowledge of colloquial English.

E. D. ROSS,
Prinopl, Calcutta Madrassa.

19. HUGHLI COLLEGE.

(1) DISCIPLINE.

1. There are exercises to be done at home.
2. Only annual examinations.
3. Nothing, though they would most likely have been punished by professors for neglecting their work during the term.
4. None, unless they are scholars; in which case their stipends are stopped. More than 34 per cent. will exclude them.
5. No.
6. By marking them "absent" in the roll.
7. A fair amount. The performance of the exercises is dealt with by professors who can punish lazy students.
8. Rs. 6 per month in all classes.

Uniform for the whole of the four-year course. There is no extra fee for laboratory work. Defaulters are struck off the roll, and on presenting themselves for re-admission a fine is imposed.

Yes; they pay Rs. 6.

Yes.

9. A breach of good manners would be met by a reprimand or punishment according to the gravity of the case.

Nothing is done in this college to encourage cleanliness; nor have I ever felt it necessary to do so.

10. I impress upon undergraduates that lying is one of the most disgraceful offences they can be guilty of; a liar merits and receives severe punishment. On the other hand, an offender who does not try to screen himself by lying meets with more mercy than justice.

11. I am afraid that there is little trace of any code of honour among the undergraduates; hence I cannot give a reply to the latter question.

12. Disobedience; disrespectful behaviour to professors; improper or disorderly behaviour either within or without the precincts of the college; anything that clashes with the moral law as generally received among men.

The punishments are—

- (a) Reprimands.
- (b) Impositions.
- (c) Fines.
- (d) Exclusion from lectures for a short period.
- (e) Rustication.
- (f) Expulsion.

I resort to both fines and impositions; the latter for choice as falling on the offenders not on the parents.

Fines vary from 4 annas to Rs. 10.

Impositions from 50 lines to 500.

13. Keys, notes, etc., are what students mainly rely upon; but especially in English, second language and mental and moral science.

14. By constantly questioning them in class and compelling them to refer to the text; and by impressing on them that a familiar acquaintance with their author is the best help to passing the examination.

(2) HOSTELS AND HEALTH.

1. Most live with their parents or other relatives; others in the hostels, of which there are two, one for Hindus and one for Muhammadans.

2. The hostels are under me; but in each there is a resident Superintendent, who is not a whole-time officer, but a teacher, doing his work in the hostel as something for which he receives extra pay.

There are at present 21 in the Hindu and 85 in the Muhammadan hostels. Both the hostels have respectable people living in the neighbourhood.

3. (a) The Superintendent manages the food supply, but in consultation with a committee of the boarders.

(b) He has little or nothing to do with the recreation or physical exercise of the boarders.

(c) He has to keep a strict watch over the moral conduct of the boarders, and has power to punish, but not to expect them, without reference to me.

4. Uprightness, fearlessness and tact.

5. Cricket and football. Games are not compulsory. Gymnastics are carried on under the gymnastic master.

6. In the hostels the boarders have medical attendance free; and the medical officer of the college is ready to prescribe for those undergraduates who do not reside in the hostel.

In case of sudden illness or the outbreak of an epidemic, I should, after consulting the medical officer, telegraph to the Director of Public Instruction who would order me to close the hostels or the college, or both as he thought fit.

7. I refuse to allow students to live in the hostel unless the medical officer states that they are sufficiently protected.

8. None, beyond giving as much light as possible in the class room.

No.

No.

Benches without backs are used.

9. No case of a consumptive tendency has come under my notice; but if such occurred, I should recommend parents to seek for medical advice.

(3) INFLUENCE.

1. The average number in each class is 36.5.

The average number to each lecturer is 27.2.

This depends on the number in the class and therefore I can give no definite reply.

The maximum number to any lecture at present is 47.

2. Very little indeed; I advise my own students what books to read and sometimes lend them suitable works.

3. Teachers and scholars see very little of each other out of school hours, unless it be in the play ground.

There is no such room here.

4. The professor of physics occasionally exhibits the magic lantern belonging to the sports club, and sometimes lectures on elementary science are given.

5. We have two hostels, one for Hindus and one for Muhammadans.

I and certain of the staff visit the hostels occasionally.

I am sometime consulted by the boarder on difficulties connected with their studies.

6. None, so far as I am aware.

I think an interchange of thought between professor and teachers of colleges distantly situated might be of great service.

I am not prepared to make any suggestion.

7. Such a council might serve many useful purposes, but I think it impossible that the University would permit it to nominate examiners.

8. I have nothing to suggest.

(4) MATRICULATION.

The proposal to abolish the matriculation examination does not commend itself to my judgment.

Nor do I approve of the alternative of substituting a departmental school final examination for the matriculation.

But while retaining the matriculation it might be advisable to confine the examination to the three subjects—(1) English, (2) a second language, (3) mathematics (arithmetic, algebra and geometry) raising the minimum pass-marks, and insisting on a much better knowledge of English idiom and composition than is at present required : the result would be disastrous for the first two or three years after the change ; but subsequently there would be an influx to the University of large numbers of undergraduates well grounded in these three important subjects, and with minds sufficiently developed to be able to proceed to an intelligent study of the subjects of a University Course. Among the results of such a change would be the following :—

- (a) Lads of immature age would be unable to matriculate.
- (b) College lecture rooms would no longer be crowded with undergraduates who having passed the entrance by cram might possibly succeed in passing the F.A. after two or three attempts, and even then would not have benefited by what they had read, for the limit of their capacity to assimilate had been passed ; hence the passing of the F.A. in their case could not be regarded as a proof of education in the proper meaning of the word : with the necessary alterations the above remarks would apply to the B.A. classes.
- (c) There would be a weeding out of incapable school-teachers throughout Bengal ; school authorities would refuse to retain masters who were not only inefficient, but by their ignorance of English were positively teaching their pupils to speak unidiomatically ; the capable teacher would realize the necessity of strenuous effort if he would keep himself up to the requirements of the time, and he would work, as he had not done for years ; and the man, perhaps a highly educated one, but who was neither a born nor a trained teacher, would have to vacate the post for which he had no vocation.

And if in all the examinations the executive of the University insisted on the examiners framing questions calculated to find out whether mind of the examiner had been in contact with the mind of the author, the text-books would be studied and mastered as they are not now. There would be less cramming if the whole race of critics from Sydney to Saintsbury were, for the purposes of the F.A. and B.A. examinations, treated as though they were not.

CHINSURA ;
The 18th March 1902. }

J. M. BILLING,
Offg. Principal, Hughli College.

20. DACCA COLLEGE.

(1) DISCIPLINE.

1. In most classes nothing beyond casual questioning, but in the mathematical classes home exercises are given and more care is taken ; but in no case can much be done in this way owing to the size of the classes.

2. No.

3. In aggravated cases the students are reported to the Principal, who, in consultation with the professor, fixes the punishment (a fine) which is then notified to all the classes.

4. For absence a fine of two annas per day. The University fix an attendance of 66 per cent. of each course of lectures as the lowest limit. A student securing that percentage is, of course, permitted to attend the examinations.

5. No.

6. If a student enters the room before his name is called, he is marked present ; if during the roll call, but after his name is called, he is marked late ; if after the register is closed, he is marked absent. A fine of half an anna is levied for " late " and two annas for " absence." In addition to this the absence counts against his percentage of attendance. Students wanting leave of absence apply in writing for the same, giving full particulars. This application has to be certified by their recognised guardians, and in the case of illness for more than three days it must be accompanied by a medical certificate.

7. Not much, and in the mathematical classes mainly.

8. Rs 6 per month. The charge is uniform for the four years. No laboratory fee is charged. Defaulters pay a fine of rupee one after the fixed date for paying fees, and at the end of the month this names are struck off the register for non-payment of fees. Graduates studying for the M.A. degree pay Rs. 6 per month for six months. Those attending the law classes pay rupees five per month. They attend regular lectures.

9. No special measures are adopted in either case ; but there is little fault to find in this respect.

10. No special steps are taken, but detected cases of falsehood are punished by fines or rustication for varying terms according to the nature of the offence.

11. Yes, I think so. Students guilty of the code would be generally looked down upon and avoided by his fellows.

12. Breaches of college discipline, insubordination, in attentiveness in class, habitual neglect of studies, mischievousness and absence without leave. These offences are punished by fining or temporary rustication, thus reducing their percentage of attendance and risking their possible appearance at the next University examination. Other offences such as fraud and offences against morality (very rarely accusing) are more severely dealt with. Imperative—if by that is meant—the imposing of literary or other such tasks is never resorted to. I consider such the most pernicious of all forms of punishments, as it is bound to create a distaste in the students for their regular studies, while the teacher's aim should be the very reverse. Such might be done in the case of neglect of studies, but then only to the extent of the neglect parts. In the case of fines the matter is sometimes reported to their parents by letter, as it is well-known that boys procure the necessary, many by false pretence.

13. Keys, abstracts and the like are generally used, more particularly in English, Sanskrit, history and logic. The other subject in a less degree.

14. The use of such books is discouraged in class, but it is impossible to prevent their use at the students' home.

(2) HOSTELS AND HEALTH.

1. Students live with their parents or with recognized guardians ; in students' messes and in the Government aided hostel connected with the college. This hostel is provided for the students of the college, collegiate school and the survey school.

2. The hostel is under the control of a committee of college professors and school teachers, with the Principal of the Dacca College as President. Its internal supervision is under a resident Superintendent who is either the college head clerk or a teacher in the collegiate school, a graduate of the University.

There is also a clerk living permanently in the hostel. The Superintendent is not, as shown, a whole-time man. There are 75 boarders in the hostel under him. The residents in the neighbourhood of the hostel are of the poorer respectable class, mixed up with houses of ill-fame. It will be impossible to find any part of Dacca where the hostel can be placed which is untainted by this defect.

3. The question is best answered by the copies of hostel rules herewith forwarded.

4. As given above, the Superintendent is a graduate of the Calcutta University.

5. The games of cricket, football and tennis are played regularly under the management of the college athletic club. Also drill, gymnastics, and

dumb-bell exercises under the supervision and instruction of the gymnastic master. Sandow's exercises are not practised.

6. The medical officer appointed by Government has medical charge of all the students, both in college and school, as well as at their own houses and in the college hostel and students' messes. His instructions are in all cases carried out. See also rule 22 of the college hostel rules.

7. Vaccination is compulsory and is under the supervision of the college medical officer.

8. No special case is taken in the matter of eyesight. The desks are of various forms having been procured by the several Principals for sometime back, many being relics of years ago. None have backs. Any change in this respect, however necessary, would involve a considerable expenditure of money, which is very difficult indeed to obtain from Government.

The college is a building over 60 years old and was built to accommodate very different numbers from those of recent years. The lighting is bad, but the ventilation is satisfactory from the open character of the building. The hostel, however, is composed of small rooms and is not so satisfactory, but is the best we can get without more funds. If Government really wishes to make proper improvements in this direction it must be prepared to make liberal grants for the purpose.

9. This is a question for the medical officer to consider. I can know nothing whatever of the matter if the subject himself is not aware of it.

(3) INFLUENCE.

1. In the collegiate school the classes range from 21 to 47 pupils, giving an average of 32 in each class.

In the college each class varies with the subjects. The numbers in the middle of last session, when the numbers were about the highest for the year, were—4th year 163; 3rd year 98; 2nd year 181, in two sections of 84 and 97 each; and 1st year 118, in two sections of 41 and 77 each; total 560.

The second year class was always taken in two sections excepting in science, in which case the science lecture hall being commodious, the two sections were taken together. As all students take the English classes, the 4th year class was greatest in this subject. In a few cases the two sections of the 1st year class were taken together. The numbers in the other classes varied with the subjects. The necessity for the two sections arises from the inadequate accommodation in the college. In connection with this subject I would remark that the suitable limit of numbers in any class depends upon the method of teaching adopted. If it is tutorial, 40 or 50 students is the limit that could be dealt with satisfactorily. If higher numbers are necessary, and a different method of teaching be adopted, whether that be by lectures, or reading, explaining and note-taking, etc., the numbers in the class need be limited only by convenience and accommodation. Tutorial work—the best form of all—can have very little place in this college owing to our large numbers and defective accommodation. It will be gathered from the above that very little individual attention can be given to the students. The maximum number to each lecturer is given above for English; in other subjects of the F.A. classes they are in most cases the same, and in the B.A. classes usually less.

2. A few students may do so, but the average students certainly does not. The University course with its list of text-books and their selected portions discredits anything of the kind. The average student enters the college with the sole object of securing the diploma. He would gladly take it as a gift if he were able; not being able to do so, he endeavours to get it in the easiest way possible. The University lays down a narrow course for him to run, and he keeps to it without deviation, and is careful to take the insides of any carves, as represented by the omitted portions. He thus needs no guidance in his choice of books. The University calendar is his sole guide.

There is the Government aided hostel attached to the college, in which 75 students of the college, collegiate school and survey school reside. This is visited by me and some of the professors from time to time. I do not think,

however, that these visits are in any way in a view to guide them in their studies. I think I may fairly say that our teaching staff is too heavily worked to give such extra attention.

In addition to this hostel, about 400 of our students, together with many others, live in 82 students' messes, located in various and distant parts of the town. For these 15 of the staff were appointed as inspectors to visit and report upon their condition and otherwise to look after their welfare, but it will be readily understood that difficulties arose in having to deal with such large numbers, and we were not able to bring them up to the full control and efficiency that the recent Government orders contemplate. Improvements will be possible in the coming session. Owing to caste influences some numbers of the staff were unable to assist in this work. Their duties were not of the kind contemplated in the question.

6. There is no such interchange of thought. It may be desirable, but would be very difficult to carry out owing to the great distance between the colleges. Such meetings might tend to reduce the very objectionable practice which prevails in certain colleges of purchasing the best students of other colleges by offering free-studentship to first class and half-free ships to 2nd class passed students of the previous examination, with the sole object of improving the examination results of their new institutions at the expense of others. The head of a college guilty of this practice could hardly meet the head of a victimised college with comfortable feelings. Some interesting results bearing upon this may be obtained from the records in the annual education reports by multiplying the fee rate per annum by the monthly average number of students, and then comparing the product with the amount realized by fees. The practice is bad from every point of view and is demoralizing to the students, who find themselves used as a commercial commodity. It should be discouraged and exposed in every way possible.

I cannot recommend any way of bringing such interchange about.

7. I have no definite opinion on the first part of this question; on the last, however, I do not think that such a body could be entrusted with the important task of nominating examiners. Such work must be done by a perfectly independent and reliable body.

8. I have no method to suggest. I do not think the influence of the University requires widening, but rather restricting and strengthening.

(4) MATRICULATION.

The matriculation examination should not, in my opinion, be abolished; indeed to do so would cause very considerable disturbance and confusion to the many thousands of parents and guardians who have, as their parents did before them looked to the entrance examination, as the one badge of elementary educational proficiency opened to them and their children. If changes are to be made they should be gradual but persistent, and with the object of improvement kept steadily in view. Whatever can be done to lessen the number attending this examination would be for the good, but something must be introduced to take its place.

I cannot approve of the idea that each affiliated college should matriculate for itself. The condition of education existing here can in no way be compared with those in England, nor can college life here be compared with that of the older English Universities. I am afraid that far more many than that represented by the Rs. 10 each to the University would change hands in securing the "privilege" of having names entered on the "list of undergraduates," and I am confident that the standard of the examination would be lowered. For apart from other considerations the misplaced benevolence or kind-heartedness so prevalent in India would lead many a tearful boy to be promoted in spite of his unfitness. Whatever examinations take the place of the entrance, they must be placed in entirely independent hands and in every way be beyond suspicion.

The alternative proposal is in some respects more to my liking; but for reasons indicated above, I should object to "issuing no certificates" to the passed candidates. The boys naturally and properly look to securing a

certificate of proficiency of some kind or other when leaving school, and such certificates to be of any value must be sanctioned by a properly constituted authority. In this matter Indian boys are very differently placed to boys of most, if not all, other countries. Hitherto the entrance certificate has been practically the only one—the only one of any value they have had to look up to, and it would be a great hardship if they were suddenly deprived of that, with nothing to take its place. In England quite a large number of examining bodies issue certificates of elementary education of the ordinary school standard, each and all of which are accepted for entry into the various callings and professions. As an example, in the regulation of General Medical Council, even ten years back, as many as 50 such examinations in the United Kingdom were accepted in lieu of their special preliminary examination, and I dare say the number is even more now. In such a case the London University could have abolished its matriculation examination, and few would have known or troubled about it; but things are very different here. I think it would be unfair to do away with the entrance certificate unless and until another examination had been well established to take its place, necessarily unaltered, and I should hope, on improved lines.

As regards a departmental examination, such has long had my approval and I have on all opportunities supported it not for reasons which are now urging the idea forward, namely, because the entrance examination has proved itself an insufficient qualification to those who wish to proceed to the University courses, but because, supposing it did that, it did nothing more. It certainly could not be regarded as a certificate of a good general elementary education, and that is what I consider every certificate given to scholars on leaving school should testify. The entrance course designed probably with a special object in view is too narrow, and is still more narrowing in its effect from the unimportant position it occupies. Boys enter our schools at a very early age, and their eyes and aims are at once directed by their parents, if by no others, to the channel leading to the entrance examination, and nothing is done nor considered that does not lead up to that goal. Seeing the vast numbers of boys annually entering our schools with that object, the course of studies cannot be considered sufficient for general purposes. One universally recognized defect is the teaching of English. In this particular a freer use of English is badly needed; their knowledge of grammar and construction of the language is all that can be expected, but more might be done to increase their conversational powers, so as to fit them for the various occupations open to them, or to follow the higher courses of studies if so desired. This might be done by making it compulsory or at least a rule to talk nothing but English in the school and within the school compound. But in this connection I am reminded of an experience I once met when urging this point. Actuated by my experience in Japan, where our students always talked English among themselves, because of its evident advantage to them to their studies, I suggested the same to one of my classes here and was immediately met with strong opposition on patriotic grounds. After that I let the matter drop. The event showed the marked difference in the common sense intelligence of the two classes of students. Nevertheless a much more intimate acquaintance with English is needed, and the question is how best to secure it.

While deprecating any sudden or great change in the entrance examination—much more its abolition—I am strongly of opinion that it does not represent a sound elementary education and that for most purposes a more general examination is urgently needed. As far back as 1886 in a letter to Government (dated Sibpur, the 12th February 1886) on the subject of technical education referred to in the Government note on technical education of that year. I wrote “the greater introduction of these subjects which aim at the training of the brain through the hand, would, I believe, be of great benefit to all classes of students and would render them equally ready to enter upon the practical as well as the literary pursuits. The adoption of an examination on leaving school of a character combining general knowledge and literary culture, similar to that recommended by the Royal Commission in Scientific Instruction in their third report, 1873, entitled the “Leaving Examination” and similar in its objects to me long since adopted in Germany which all boys on leaving school are subjected to, would best perform the functions now performed towards the primary and secondary schools by the University entrance examination. This leaving examination should be

of such a comprehensive standard as to enable the student to exercise his choice of a profession with intelligence and discriminations."

That paragraph expresses my opinion now, but my subsequent experience has shown what a deeprooted hold the entrance examination has upon the people, which they are very slow at taking to changes. This is abundantly shown in the cases of the bifurcation of studies in high schools and the recent scheme for vernacular education, both of which are practical failures in Dacca.

The former I had considerable hopes of when started; but latter I consider a retrograde step. Seeing how very defective our boys are in English, they should begin learning it at the earliest possible age. As it is, the classes in which English has, by the new rules, been dropped, are practically empty, the parents preferring to send them to other schools in the locality in which the restriction does not exist.

Assuming that any change that is made must be of a gradual character, I would submit the following for consideration.

That the entrance examination be retained on much the same lines as at present with perhaps an improvement by giving English a more prominent place; but that a higher percentage should be fixed for passing to the higher university courses; and that only those who obtain this higher percentage should accordingly be considered as undergraduates. Those who pass below this standard should be granted certificates as such.

At the same time the Education Department should initiate final or leaving examinations in schools under their control, which should be of equal or higher order of difficulty, or at least of a broader character than the entrance examination, and that admission to the higher university courses from this examination should be restricted to a similar percentage as that adopted in the entrance examination.

I see no reason why two such examinations should not run side by side (indeed I consider it very desirable to have other examinations than the entrance), and I feel sure that in a little time the Government certificate would be valued for general purposes just as much as the entrance certificate is now. In time, I have little doubt that special classes would be formed in schools with the object of training for the university examinations, in which none would be admitted who had not passed either the ordinary entrance or Government examination, just as many of the European schools have now special class for various examinations. If such classes were formed, much more attention could be paid to these subjects—English in particular—in which the entrance passed boys are found to be so defective.

Under such an arrangement the Government schools would drop the ordinary entrance examination, taking the Government one in its place; while the other schools would still hold the entrance examination. The success of any such scheme as that now suggested would depend largely upon the attitude displayed by the university authorities towards it but as the university has so far failed by its standards to turn out candidates properly qualified to proceed to a college training it should be prepared to look favourably upon other schemes put forward with that object.

I am not in favour of reducing the entrance examination to English, a second language and arithmetic; such a change would seriously affect the subsequent courses as what is taken away from the entrance is added to the latter. Nor do I agree with the proposals to fix an age limit. Such would operate against boys of special ability; and I have had many that well deserved to pass at the low age they did.

What is wanted is to secure proper qualification. This, as has been shown, is not done with the present low percentage (33 per cent. and 25 per cent.) hence the proper step appears to be to raise it for those proceeding to the higher course while keeping it the same for many who require the certificates for other purposes.

E. F. MONDY, A. R. S. M.,

Principal, Dacca College.

The 21st March 1902.

21. RAJSHAHI COLLEGE.

(1) DISCIPLINE.

1. During each hour of lecture a short time is set apart for asking questions on the subject of the previous lectures.

2. Monthly and annual examinations are held.

3. During each day's oral questioning those who fail to answer satisfactorily or give such answers as to show that they have done little or nothing at home are marked absent, or fined at the discretion of the professor, and those who fail to keep 25 per cent. marks in the aggregate at the annual examination held in the 1st and 3rd year classes are not promoted.

4. No other penalty except the loss of presence which means loss of percentage of attendance is attached to absence from class without leave, 34 per cent. of absence exclude an undergraduate from the F.A. and B.A. examinations.

5. An undergraduate thus excluded is not permitted to appear as a private candidate.

6. Late attendance is punished with loss of presence. The boy who is late is marked absent.

7. On any day the boys are required to prepare the subject-matter of the last lecture, and to come so prepared that they may follow intelligently lectures of that day. Any one failing to answer satisfactorily questions on last day's lecture is punished with absence or fined at the discretion of the professor.

8. The fee is charged uniformly for all the college classes at the rate of Rs. 3 a month. No extra fee is charged for laboratory work. The names of the defaulters for any month are struck off on the last day of the month. The graduates when reading for the M.A. examination pay the usual college fee of Rs. 3 a month. They attend regular lectures and laboratory work in case they are reading for the M.A. examination in science.

9. Any one found guilty of bad manners is expelled from the class or fined. Any boy not duly dressed is also expelled from the class.

10. No steps are habitually taken, but any one found guilty of untruthfulness is exemplarily punished.

11. I regret to have to say that no such code of honour as contemplated in the question has been developed.

12. Not preparing the subject of the last lectures, want of punctuality, bad manners, uncleanness, untruthfulness are the punishable offences. The punishments consist in marking absent, imposing fines and expelling from the class.

13. The keys, abstracts, etc., are much used, mostly in English.

14. They are frequently advised to read their text-books intelligently and thoughtfully and during each day's questioning, such questions are put as cannot be satisfactorily answered by the help of the keys alone.

(2) HOSTELS AND HEALTH.

1. The undergraduates live in the college hostels and with their guardians. There are not students' messes in the town. There are four hostels attached to this college, the private native Hindu boarding house, the Rani Hemanta Kumari boarding house, the Madrassa boarding house and the Mahomedan boarding house.

2. The hostel is supervised by the Principal and the resident Superintendent who is the 2nd master of the collegiate school and therefore not a whole-time man. In the Hindu hostels there are 104 boarders, practically under one Superintendent; in the Madrassa boarding house there are 30 Mahomedan boarders under one Superintendent, and in the Mahomedan boarding house there are 18 boarders under one Superintendent. The boarding houses are practically within the college premises and are surrounded by bazaar and the houses of low class labouring men.

3. The resident Superintendent is to see that the inmates go on with their studies during hours specified for the purpose; that they keep their beds, etc.,

neat and clean; that they do not go out after a specified hour at night, and that they come back to their studies after evening game and walk not later than a specified hour.

The kind of food to be given is determined by the Superintendent. There are sporting clubs of the inmates of the hostels. Any inmate guilty of immoral conduct is punished with expulsion from the boarding houses.

4. The resident Superintendents are teachers of the school or Madrassa attached to the college.

5. Football, cricket, tennis, besides country games, such as Kabati, etc., are the most popular games. No games are compulsory. There are some boys who go through a regular course of dumb-bell exercises under the supervision of the gymnastic teacher.

6. There are arrangements as far as possible for proper ventilation and light in the rooms of the college and hostels, and there is also good arrangement of drainage. There is an Assistant Surgeon in medical charge of the college and the hostels, who looks after the boys when they are ill, and advise on sanitary matters connected with the college and the hostels. There is a dispensary attached to the college, with a compounder who dispenses medicine to the students and teachers only according to the prescription of the College Surgeon or any other qualified medical practitioner. In case of sudden illness the resident Superintendent, if he be there does what he thinks best, until medical advice is received, and in case of the outbreak of epidemics all necessary hygienic precautions are taken with the advice of the College Surgeon.

7. Vaccination is encouraged. The inmates of the hostels unvaccinated or vaccinated long ago, so that the marks are indistinct, are vaccinated or re-vaccinated under the supervision of the College Surgeon.

8. No other special measures except making the rooms sufficiently lighted and airy are taken for the eyesight of the boys. The new writing desks are made on all hygienic principles. Where possible light and ventilation are controlled by a similar consideration. The benches used by the students have no backs.

9. No case of a boy having a consumptive tendency came to my notice in this college.

(3) INFLUENCE.

1. In the B.A. classes the average number of scholars is about 45, and in the F.A. classes the average number is about 85. The average number of pupils to each lecturer are 40 and 85 in the B.A. and F.A. classes respectively. The maximum number to a lecturer is 100 or a little over in the 2nd year college class.

2. The average student do very little private reading outside his text-books.

3. The scholars have always access to their teachers out of school hours. All the professors together have only a single room. There they may receive and talk to the boys.

4. In this college the professors and teachers are invited to the games of the boys, and many of them play with the boys.

5. The college hostels are very frequently visited by me and the professors, and every opportunity is taken advantage of in advising them as to their conduct and studies.

6 & 7. There is, I think, little or no interchange of thought and influence between colleges distantly situated. No doubt it is highly desirable that there should be such interchange between professors and teachers of different colleges. For this purpose there may be instituted a teachers' association which may have its head quarters at Calcutta with branches in moffussil. The annual meeting of this association may be held by turn at different educational centres. The teachers' association may be utilised to nominate examiners for the University examinations.

8. I beg to suggest that, with the object of unifying and widening the influence of the University, inter-collegiate, games may be instituted by the university, and prizes and trophies offered for them by it.

The majority of the members of the university, I mean the senators, are outsiders in the sense that they are not members of the colleges affiliated to it. Of about 200 the members of the senate, only about 20 are members of colleges. It is therefore not natural that many colleges that have none of their staffs in the university will look upon her as a step-mother. It would go a great way, I think, in unifying the influence of the university if all the first grade colleges had at least their Principals as members of the senate. Then the colleges will feel that they have some voice in the deliberations of the senate of the university to which they belong.

(4) MATRICULATION.

On this subject I would suppose the alternative proposal of confining the matriculation examination to those only that really wish to take up the university course, a departmental school final examination with a wider and more practical scope, taking the place of the present matriculation for purposes of public service. The candidates for matriculation may be examined only in the three following subjects: *viz.*—(1) English, (2) a second language, (3) mathematics (including arithmetic, algebra and geometry up to the present matriculation standard). The minimum pass marks should be raised in all three to 40 per cent.

BOALIA;
The 25th March 1902. }

KUMADINI KANTE BANERJI,

Principal, Rajshahi College.

22. PATNA COLLEGE.

(1) DISCIPLINE.

1. Written work is given by the professors when ever they find time to do so, but it is obvious that when there are even fifty students in a class, the labour of correcting written exercises is very great. See also the answer to 2.

For my own part as Principal I should never find time to take written work. I have to content myself with *viva voce* questions in class.

2. An annual examination for promotion is held at the end of the first and third year courses of study and test examinations at the end of the second and fourth years. At first I thought of having examinations twice a year but the staff thought that this would interrupt the teaching too much.

3. Students who fail at the annual examinations at the end of their first year or third year courses will not be promoted to the second or fourth year classes I do not know whether I should be allowed to go further. Just before I left Patna the question was raised by the professor of mathematics as to what should be done with the students of the F.A. classes who refused to read algebra. The University of Calcutta has so arranged the F.A. examination in mathematics that a student can pass it without knowing any mathematics at all. He simply learns by heart all the propositions in Euclid and Conics, and in this way secures pass marks. Hence many students never read any algebra at all and never make the slightest effort to do so. They pay no attention to the lectures. The professor asked what should be done with such students. Can they be really attending the lectures, or should they not be marked absent? I suggested that it would be better to insist on their getting a certain number of marks in algebra in the annual examination.

4. A student who absents himself altogether from a lecture without leave incurs no penalty beyond being marked absent. A student who after the roll is called leaves the class without permission is fined Rs. 5. A scholarship-holder absent without leave loses the pay of his scholarship for that day.

The percentage is that fixed by the University 66 per cent.

5. No.

6. The roll is to be called by the professor immediately on entering the class. Any student who comes to the class after the roll is called is marked absent.

7. See the answer to 1.

8. The college fee is Rs. 6 a month in all classes. No extra fee is charged for laboratory work. A day is fixed for paying fees, usually about the 20th of the month. All who pay after the fixed fee day are fined four annas till the end of the month when the names of defaulters are struck off the rolls. If they wish their names to be again entered, they must pay a re-admission fee of Rs. 6. We have hardly any students for the M.A. degree. Such as we have pay Rs. 6 a month and no more.

9. Breaches of good manners and discipline are punished by fines or in extreme cases by expulsion.

The best way to encourage cleanliness is to take care that the buildings and furniture and the compound of the college are neat and clean and as far as may be beautiful. In the Patna College I have done my best to keep the place clean. I have made a garden in the compound and placed pictures in the hall. I altogether agree with Mr. Havell when he says : " A great deal might be done towards developing the artistic sense of the students by making their surroundings more attractive and beautiful. A well kept flower garden may be very beautiful and need not be an expensive luxury. Neatness, care and taste in the up-keep of the college buildings and all their surroundings would tend to give the student the feeling for order, method and fitness which is the foundation of all art." I would add that the same considerations apply to students' lodgings and hostels.

Mr. Havell thinks that these things would not cost much, but they would cost something as I know from experience and additional money would have to be granted for such purposes.

10. Both the professors and myself are at all times accessible to the students. Friendly relations between the teachers and the taught are encouraged. I believe that the students of the Patna College are convinced that we desire to promote their best interests. Confidence is thus established on both sides. We expect the students to tell us the truth, and I do not think the students very often tell deliberate lies.

11. There is not much development of a code of honour amongst students. As far as I know good students make no attempt to check or condemn the bad. At present there are no students who are recognised as responsible for the general behaviour of the students. My theory is that the Government scholars ought to be responsible, but they have not enough authority or prestige.

12. There is no set list of recognised offences. I have already said that breaches of discipline are punished by fines or expulsion, and I have given the instance of a student who leaves his class without permission.

13. I believe that the practice of using cribs, keys, etc., is universal. The system of the examinations fosters this. The examiner does not see the whole of a candidate's work. Very often he only sees the answers to half a paper. He hardly ever considers the effect of the candidate's work as a whole. He looks at it piece-meal. He looks for certain points. If he finds those points, he gives marks. Thus the student is obliged to take refuge in abstracts and summaries which he learns by heart.

The use of cribs is seen at its worst in the case of Sanskrit. This is too difficult for ordinary students to take as a second language. Most students make no attempt to learn the language or the grammar. They have neither Sanskrit dictionaries, nor Sanskrit grammars, nor Sanskrit texts. They simply buy a crib to the prescribed portions for example, Tara Kumara Kaviratna's edition of the first three cantos of *Raghuvansam* with Bengali and English translations, a full explanation of the entire text, the sense and purport of every *śloka* and of every sentence in easy Sanskrit syntactical connection, expounding of Samasas and all grammatical constructions, derivation of the words, the conjugation of all the roots in their different tenses, illustration of figures of speech, explanation of all the allusions, miscellaneous notes, model questions and every other device that can be thought of to enable a man to pass an examination in Sanskrit without knowing anything about the language or the grammar. The crib gives one or two *ślokas* and then a whole page or so of translation and notes. This the stu-

dents learn by heart. Thus they pass the examination without knowing anything about Sanskrit. The same applies to Latin and Greek as taught here. The candidates may and most of them do pass in those subjects without any knowledge at all of the languages. They simply learn their cribs by heart.

The case of Persian, I believe, is better.

14. As long as the university system of examination encourages the use of cribs and abstracts, as long as teachers are allowed to flourish, unproved and make large sums of money by publishing cribs, it must be difficult to induce the students not to rely on such aids. We speak against these things to the students, but they do not pay much regard to what we say. The Sanskrit lecturer tried to induce his pupil to get the text of the *Raghuvansam*, but I think without success.

(2) HOSTELS AND HEALTH.

1. Anywhere. Some live with their parents, some with their guardians, some in messes, some in their own houses by themselves. No hostels are provided for them.

2, 3 & 4. There are no hostels in Patna.

5. The students play football, cricket and tennis. No games are compulsory. There are no athletic exercises. Each student subscribes a rupee to the athletic fund. The Government gives a grant towards the annual athletic, sports, but has withdrawn all other aid from the athletics of the Patna College. There is a medical officer in charge of the Patna College who attends two or three times a week.

7. No.

8 & 9. No attention is paid at present to these points. I have been intending to have the students in the Patna Collegiate School weighed and measured and their eyesight tested, and I passed orders to that effect some time ago, but these orders have not yet been carried out.

(3) INFLUENCE.

1. There are 58 students in the fourth year class and 82 in the second year class, 33 students in the third year class and 48 in the first year class. So that, roughly speaking, there are about 55 students on the average in a class. There

* Note.—These numbers are a good deal below the average owing to the effects of the plague-scare of last year.

are nine lecturers (including the Principal). Thus the average number of students to each lecturer is about 25.* The honour students receive individual attention. In special cases a student may receive individual attention from some professor to whom he may be known privately. But a professor can hardly pay any individual attention to the average student. To begin with the numbers are very great. Then the departmental system defeats any attempt to take any interest in individuals. To do so, a professor must study his students a considerable time; he must think about them and make notes. But long before he can reach any conclusions, he may be transferred to another college or ordered to teach another class. In these circumstances how can a teacher be expected to take any individual or personal interest in his students?

In the Patna College a professor may have more than 100 students in his class.

2. No. He has no time.

3. I have already explained that both the professors and myself are always accessible to the students. I never refuse to see a student. There is, however, no place in the Patna College where a professor can receive students.

4. There is an institute in Patna for bringing together teachers and students. We also encourage college meetings and social re-unions.

5. There is no hostel in Patna.

6, 7 & 8. I would venture to suggest that these questions are premature. First let us get a university which can examine properly, and let us get colleges that can teach properly.

(4) MATRICULATION.

I hardly think that the affiliated colleges are all of them fit to be entrusted with the business of matriculation. I should like to see the matriculation examination confined to those who wished to take up the university course. I would reduce the scope of the examination to English, vernacular and mathematics. The other subjects would be optional is relegated to the school final examination, or be subjects for examination for Government scholarships. If any other classical language is made a subject, let it be Persian or Latin, and let us insist on a genuine knowledge of the language. Latin as at present taught and examined in is of little use. Sanskrit, I believe, is too hard to be taught as a second language. I should give four papers to each subject and raise the pass marks to 60 per cent. No candidate should pass who makes, say, 3 gross grammatical mistakes.

C. R. WILSON,

Principal, Patna College.

23. BRAJAMOHUN COLLEGE, BARISAL.

(1) DISCIPLINE.

1 & 2. To test the work done by the students of junior F.A. and B.A. classes during the first six months questions are asked in the classes and in each subject, and after the F.A. and B.A. candidates are sent up, an examination is held for both the classes in January, after which examinations are held every week.

3. They are rebuked in and out of college hours, and sometimes tasks are imposed upon them.

4. No penalty. The university standard.

5. No.

6. For late attendance on two or three consecutive days students are marked absent.

7. The students are directed to get up at home the lectures already delivered in the classes and to come prepared for their new lessons. Questions are asked to test their preparation. In mathematics home-work is given to students, and in the F.A. class the home-work done is presented by students to their teachers.

8. Rs. 3 per mensem.

Uniform.

No.

Fines are realised for non-payment on or before the appointed day and defaulters, names are struck off on the 26th of each month and re-admission fee charged. We have not yet opened classes beyond the B. A.

9. Their defects are pointed out to them both in and out of school. The teachers generally mix freely with the students and try to influence them by example and instruction. In this respect the students are much benefited by the personal influence of Baboo Aswini Kumar Datta, the proprietor of the college, who is one of the professors and who, by means of readings, exhortations and private conversation at his house and during his afternoon walks, tries his best to instil good principles and ideas of good breeding in the minds of the students.

Cleanliness is encouraged by trying to check slovenly habits in school and in boarding houses.

10. (a) The motto of our institution is "Truth, Love, Purity." These principles are inculcated by means of sermons, readings and songs in the Saturday meetings of an association called the "Teachers and Students' Friendly Union".

- (b) The work of this union is supplemented by private talks between teachers and students at their private houses, boarding houses and in excursions, picnics and pleasure trips.
- (c) When students fill in forms of application for admission to the University examinations, the statements as to their ages are very often tested and true entries insisted on to the best of our powers.

Some students who misrepresented their ages when appearing at the entrance examination from other schools stated the truth when appearing at the F.A. examination from our institution.

Untruthfulness is punished according to the gravity of the offence.

11. It was gratifying to observe that such a code of honour was working very well among our students some years ago, but I regret very much to have to state that the code has, to a great extent, got relaxed on account of unhealthy rivalry.

That the spirit had not altogether died out is evident from the fact that a band of students of this college called "The Union Band" takes notice of offences of students and tries to correct the guilty before bringing such offences to the notice of the authorities of the college.

12. Using unfair means at the examination, making false statements, violating rules of discipline and other offences against morality and discipline are punished by fines and expulsion.

Imposition is resorted to in cases of neglect of studies.

13. They are very extensively used in spite of the remonstrances of professors. The rage for key-making should, by all means, be curbed.

14. Students are earnestly requested not to rely on these aids and sometimes questions are framed in such a manner as to baffle the resort to such aids.

(2) HOSTELS AND HEALTH.

1. With guardians, in boarding houses and messes.

Yes.

2. The supervision of our boarding house rests with the proprietor, myself and my colleagues. There is a resident Superintendent.

Native.

He is a whole-time man.

About 50.

By gentlemen.

3. The Superintendent looks after the health and moral conduct of the boarders—

(a) He selects articles of food in consultation with the boarders.

(b) No control is exercised in respect of physical exercise and recreation, but boarders, as a rule, engage in athletic games or take long walks.

(c) Cases of misconduct are brought to my notice or that of the proprietor.

4. He is a graduate.

5. Football, cricket and certain indigenous games such as "Doo—Doo," "Dariabanda," etc.

No.

Some students go through Sandow's exercises.

There is a gymnastic teacher who supervises drill and games. Gymnastics are not popular.

6. We insist on cleanliness and good drinking water in our college and in the boarding house. We have a band of our students called "The Little Brothers of the Poor," superintended by a teacher of our institution. It is the duty of this band to call in doctors and nurse the sick. Their services are much appreciated.

In cases of sudden illness the teachers of the college and the students take prompt measures for relief. There has been no serious outbreak of any epidemic.

7. The vaccinator comes to the college at times appointed by the municipal board and our students are allowed to be vaccinated.

8. Seats are arranged in such a way as to protect the eyes of the scholars from the glare of the sun.

If it is meant that the spine should be kept erect, the desks do not answer the purpose for all students in the college.

The college house and the boarding houses are well lighted and ventilated.

Without backs.

9. I know of one case only.

The student was advised to transfer himself to a better place.

(3) INFLUENCE.

1. I give you figures for the last year—

Junior F.A. class	...	...	...	...	95
Senior F.A. class, section X	...	...	...	...	102
Senior F.A. class, section Y	...	...	...	...	43
Junior B.A. class	...	...	...	...	31
Senior B.A. class	...	...	...	...	49

Questions are asked and answer papers of all the students are examined sometimes in their presence.

The maximum number of pupils to each lecturer in the F.A. classes is about 100 and the maximum number in the B.A. class is about 50.

2. Not much.

Some of the students consult the teachers in the choice of books.

3. Yes.

They have free access.

No.

4. The students may see their professors at their houses at all hours.

The pupils and teachers meet together in debating societies, friendly union meetings, entertainments, pleasure trips, picnics and walks.

5. Yes. We have one.

Yes. We do.

6 & 7. No.

It is, of course, desirable; but I do not expect much benefit from such interchange of thought and influence until colleges conducted on commercial principles are weeded out.

This can be done by periodical conferences.

Such a proposed council ought not to be trusted with the task of selecting examiners. It would lead to quarrels.

8. I would suggest for the purpose of such interchange of thought "to unify and widen the influence of the University" that a representative of each first grade college should have a seat in the syndicate or, at any rate, in the senate.

(4) MATRICULATION.

I cannot approve of each college being allowed to matriculate for itself. I am afraid the privilege would be abused from mercenary considerations.

If the examination has assumed huge proportions, the University may be split into two or may have two or three branches.

I have no objection to the founding of a departmental school final examination for those who would not take up a University course.

The subjects for matriculation should not be curtailed and the minimum pass marks should not be raised.

BAJENDRANATH CHATTERJI,

Principal, Brajamohan College, Barisal.

BRAJA MOHAN INSTITUTION, BARISAL.

(1) DISCIPLINE AND MORALITY.

On account of the multiplication of colleges—some of which are conducted on commercial principles and some of which without resources—the students are practically the masters of the situation. It is necessary, for the sake of discipline and the true interests of education, that unhealthy rivalry should be removed by the elimination of those colleges which are being maintained for mercenary considerations and those which are not properly managed, have no suitable buildings or are not decently equipped. You will be surprised to hear or, you have very probably seen, that there are colleges which cannot boast of more than three small shelves of books for their library or of houses which are no better than hovels for their buildings. It would be unpleasant to draw your attention to the tricks which are used for attracting students. No hard-and-fast rules can ever cope with the ingenuity of those who are past masters in the art. You cannot make us honest and true by rules and regulations. Supposing you curtail the number of free-studentships in my college, I may evade your rule and form compacts of secrecy with the students and when you call for a report I may cook the accounts and submit them to you. I have even heard of keeping two accounts—one of them false and meant for submission to inspecting officers. The more you frame rules for the enforcement of good management, you make us the more disingenuous and deceitful. If you lay down a rule that I must pay salaries to the professors according to a scale framed by you, considering the large number of our graduates who do not know what to do with themselves after they have had their M.A. degree, I could easily manage appointing some of them who would agree to serve me for lesser salaries than are laid down in your scale and yet would not blush to announce that they are paid according to your rules.

2. I would use, in regard to most of your rules, the words which the late Pandit Vidyasagar used in reference to the existing rules about percentage of attendance—that they “operate harshly on such students and institutions as strictly conform to the rules” and “give an advantage to such students and institutions as evade or violate the rules.” Until those who are intrusted with the work of education be men of character, we need not expect any good arising out of your rules. Even now, after all that you had done to castigate a certain college some years ago, rules of attendance are often evaded and violated without any fear of detection. Vidyasagar rightly pointed out that where the Principal and his associates are not what they ought to be, the University has no means of detecting any imposture or punishing offenders. You know very well how Law classes are managed and I know it very well to my cost.

3. The only remedy lies in turning out honest men for the teaching staff, and that you cannot do unless you give a sound moral training to your students—your would-be teachers. I feel it is simply because we have not done anything worth mention in this direction that we have teachers who cannot be relied on.

4. In regard to Moral Training, I agree with what Dr. Martin said in paragraph 380 of his Review of Education in Bengal from the year 1892-93 to 1896-97 :—
“The more one thinks of the present situation, the more one feels impressed with the truth of the conclusion that the policy of religious neutrality has been carried too far ; that the present system of godless training has been more destructive than constructive in its effects ; it is said that while the bare *materialism* of the West has dispelled a mass of ignorance and superstition, they have, at the same time, created a feeling of scepticism and a spirit of irreverence which is sapping the very foundation of the moral side of a student's character. It is for this reason that some sort of religious instruction has been advocated, not, of course, of a sectarian character, but on the line of universal truths, with the cardinal idea of a Supreme Being controlling and regulating all our thoughts and actions. There is, moreover, no reason why the Mahomedan students should not join the Maulvi, and the Hindu students the Pandit, in some prayer, before and after school-work, just as Christian students of various denominations do in schools under Christian management.”

5. There could not be a better suggestion than Dr. Martin's for curbing the growth of the tendency towards impiety, untruthfulness and disregard of

authority which characterises the rising generation in this country. The stringent rules which have been framed by the Director to prevent falsification of age can be cleverly evaded and set at naught by falsification of age at the time of admission except in the cases of those who joined the lowest class of an entrance school when only 6 or 7 years' old.

6. I do not believe in moral training without the sanctions of religion. I do not think that any ethical system which does not hold out anything higher than the ordinary sanctions of society, can effectively stem the torrent of scepticism, irreverence, self-assertion, untruthfulness and impurity which is sweeping away the very groundwork of a student's character. Such a system may be of some use to some persons, but their number may be counted on the fingers, the student community in general can never be expected to be controlled by such weak and thin bonds.

7. There would be no difficulty in following either of the schemes suggested by Dr. Martin or both in any of the colleges and schools which observe religious neutrality. Considering the sad plight our young men have drifted into, it seems to me imperative that some such scheme should, at once, be adopted by all educationists in our country. Even if Government would not come forward, I do not understand why the majority of the students of the universities who belong to private or aided colleges should not have the benefit of such training.

8. The experiment of imparting moral instruction without a religious basis was tried in my school for years and was found waiting. We then introduced the religious element and founded a Union for the purpose of presenting to students, by means of prayers, sermons, readings and songs, unsectarian cardinal principles of religion and morality without any reference to any doctrinal question of any particular creed. Such an institution might be founded in all our schools and colleges and prayers offered, hymns sung, and discourses delivered on the truths which are common to all religions and on the lives of great men of all countries without any distinction of colour or creed.

9. To this, other schemes might be added :—

- (1) Different associations of the students of different sects might be established under the presidency of teachers of different persuasions.
 - (2) During visits to boarding-houses teachers should make it a point to talk on elevating topics with the boarders and sometimes prayer-meetings should be held in these houses.
 - (3) As entertainments of a pure type form an important factor in moral training, I would suggest organising excursions, picnics in which teachers and pupils should mix freely in conversation and manly games, and recitations, songs, facetious stories and anecdotes from the lives of great men should be introduced to enliven such parties.
 - (4) To teach the students their duties to their neighbours or to infuse into them a spirit of practical beneficence a band might be constituted consisting of teachers and students to attend the helpless sick and serve the needy poor. I have seen students cheerfully carrying on their shoulders the sick or the maimed to hospitals or other shelters. I have seen them nursing them and attending to their wants, I have seen them constructing with their own hands thatches and *tatties*, digging earth, making plinths for housing some helpless cripple. That these duties might not interfere with their studies there might be a rule that in nursing the sick, none of the students would be allowed to attend more than two hours or so at a time.
 - (5) The system of self-examination should be encouraged and records of such examination periodically submitted to teachers who take a loving interest in guiding their pupils.
10. We are convinced that nothing is so helpful to boys as personal contact with their teachers. Students should be allowed free access to the teachers at

their houses. I can vouch for the efficacy of efforts in these directions from practical experience. Our humble work has been, to some extent, successful and has been recognised by the Director and other officers of the Education Department in their annual reports and remarks. We regret, however, we have not yet been able to do much towards elevating the moral tone of our students as we feel we are not ourselves worthy of the position of the teachers, and there are forces at work which loosen the foundations of even the little work we expect to do.

11. I would add another scheme for the purpose of developing a code of honour among students. A band of students should be formed whose duties would be to try to bring about good, sound, and friendly relations among school fellows, to settle points of dispute, arbitrate in quarrels and fights, and adopt measures for correction of those who are found tripping.

(2) CURRICULUM OF STUDIES.

I would not trouble you much on this subject. I would simply point out that History seems to be at discount in our university. Two small primers on Greece and Rome form the whole course of History for the First Arts and even this the student is altogether free to reject for some other subject. It is optional with even the A. Course B.A. students. That study which would mainly contribute to the formation of a national character and would enable the rising generation to understand on what principles the order and progress of nations depend is sadly neglected by our university. It is often very amusing to observe how students of even the senior B.A. class are altogether ignorant of the most important events in the histories of England and India. I would make History a prominent compulsory subject both for the F.A. and the B.A.

(3) AFFILIATION AND MANAGEMENT OF COLLEGES.

Our Syndicate have been a little too generous in affiliating colleges and this has been the root of all evil. It is extremely difficult to maintain discipline and impart moral training in the face of unhealthy rivalry. I would enquire and find out before affiliating a college whether the founder is in earnest or not about the undertaking and whether he means education or pecuniary gain. In order to test his earnestness, I would make him spend, at least Rs. 5,000 on buildings, furniture and the library before recognising an Entrance school and Rs. 20,000 before affiliating a college up to the First Arts standard, and Rs. 30,000 up to the B.A. standard. Besides I would fix an area within which I would not affiliate more than one college.

2. In order to see how colleges are managed, the Director or the Syndics should periodically inspect them. Constant changes in the staff should be strongly checked. We cannot expect moral training from teachers who come and go like summer-birds. I know of a college which had 12 principals in 12 years, not to speak of the incessant changes in the professorial staff.

3. Such inspection would be sufficient to insure the maintenance of an efficient staff in every college. The proposal of framing a list out of which professors shall have to be selected does not seem to me unobjectionable. It would lead, I am afraid, to nepotism and if it be restricted to only first class men, I need only say, from my knowledge of the work of the professors of my college, that first class M. As. are not always first-rate teachers.

(4) THE SENATE.

Every first-grade college should have the privilege of sending a representative to the Senate. It is but doing justice to those who are most interested in the cause of education that they should have a potent voice in that body.

BARISAL,	}	ASWINI KUMAR DATTA,
<i>The 4th April 1902.</i>		<i>Proprietor, Braja Mohan Institution, Barisal.</i>

RAJ CHANDRA COLLEGE, BARISAL.

(1) DISCIPLINE.

1 and 2. Periodic examinations (monthly in most cases) and the annual examination are the chief measures adopted to test the quantity and quality of work done in the junior F. A. and the junior B. A. classes. Questions are at times asked to be answered orally in the classes or to be solved on the boards in the cases of the subjects which allow such a thing. One examination in every subject is sure to be held every month and the papers are generally returned after fair correction and the marks are entered into the mark-book, the students are warned, when they are found not to improve from the comparative study of the marks obtained at different examinations, against any neglect of study thus betrayed.

3. The students who persistently neglect their studies are repeatedly reprimanded in the class and privately by the professors, and attempts are made to correct them sometimes, when possible and necessary, through their guardians. Many students of this kind are not to be found in the Mofussil especially in the B. A. classes.

4 and 5. The students who absent themselves from their classes without leave, suffer from the loss of percentage in the subjects concerned and are reproached when found in the classes afterwards. Private rebukes from the professors are found to make many irregular boys regular. Absence from thirty-four per cent. or more of the lectures delivered excludes an undergraduate from either the F. A. or the B. A. examination and no undergraduate thus excluded from an examination is permitted to appear as a private candidate.

6. Sharp notice is taken of unpunctuality in attendance and the boys guilty of it are warned against its repetition; a boy who is more than half-an-hour late in coming to a lecture is marked absent. A habitual unpunctuality meets with sharp reproach and loss of percentage even for a delay of less than half-an-hour. Cases of this nature are very rare.

7. Much home-work is not given to undergraduates except in Mathematics. It is very scarce with other subjects. Warning or reproach for delay is sufficient to enforce the performance of such work.

8. The fee charged is Rs. 3 per month, the charge is uniform for all the four years. No extra fee is charged for laboratory work. The defaulters are first warned and then fined generally at the rate of one anna per day for each day of delay in payment at the expiration of the time allowed in warning. The fine charged for the irregularity of payment after a long vacation is generally one rupee. The graduates also are to pay a monthly fee of Rs. 3 when preparing for higher examination (M. A. or B. L.). Considerations in the shape of free studentship, half-free studentship and one-third free studentship are made in the cases of the poor and deserving students in all the classes. The graduates preparing for higher examinations in the art subjects and law attend regular lectures. We have no arrangement for the higher study of the physical sciences for the graduates.

9. A strict eye is always kept on the manners of the students and any breach of good manners is promptly taken notice of. The students are warned against such things both in and out of the classes. The students have instructions on this subject in the clubs and unions attached to the institution for their moral welfare (we have a club for all the college students, a Hindu union for the Hindu students and a Mahomedan association for the Mahomedan students. For a flagrant breach of manners a student is sent out of the class and in some cases punished with fines or suspensions from lectures. But such cases are very rare.

Cleanliness is generally encouraged by instruction in the classes, clubs and unions. Want of cleanliness in different shapes is often taken notice of and warned against. Personal examples from professors and teachers are found to produce much effect here.

10. Any case of untruthfulness when found out meets with sharp reproach, and a student guilty of it is generally put to shame for it before his fellow stu-

dents. The consciousness of the students of the righteous indignation of the professors and teachers against untruthfulness in any shape is found to have the greatest effect.

11. Our students are generally found to have a tolerably developed sense of what is honourable and what is dishonourable for a gentleman and a man of education, and this is no doubt to a great extent due to the moral tone and dignity maintained in the college. Our dealings with the students, I think, have made it tolerably clear to them that what a code of honour we wish them to follow. And they are generally found not without any attempt to conform their lives to it. Any student found guilty of a breach of the code is looked down upon in contempt by many of his fellow students. Recently I heard a complaint from a student of the 3rd year class against one of his class fellows for uttering improper words in the class which I took prompt notice of.

12. The recognised punishable offences in the college generally are (1) immoral conduct of all kinds; (2) unbecoming behaviours with professors and fellow students; (3) unbecoming behaviours in messes, boardings and public places; (4) violation of the college rules meant for good discipline and smooth performance of work. The punishments inflicted range from fines to rustication according to the nature and circumstances of the offences, they are generally of four kinds, *viz.*, (1) fines, (2) suspension, (3) expulsion, (4) rustication. In the last three years two students have been expelled and one rusticated for bad moral character. There are occasional cases of fines for minor offences.

13. What are called cribs are not at all used by our students. They use keys and notes mostly in the study of languages and literary works. Abstracts and sketches are used chiefly in the study of history both in the F. A. and B. A. examinations. There was a tendency of using and relying on abstracts and notes in the case of philosophy, but the syllabus system and the nature of the questions are making that impossible every year, and so the tendency is declining. In B. A. physics notes are found to be used.

14. No abstract, key, note or other aids-memoire is recognised in the class or recommended by the professors; but their use is discouraged. The text-books are systemically gone through and independently explained in the class and in class examinations such questions are set as would require a systematic study of text-books. In philosophy many books are recommended by the University on each branch of study. The students are required to study the best of the books recommended in each branch as selected by the professor, the difficulties of which are explained in the class. The professor delivers a course of written lectures on the syllabus to give the students a clear general knowledge of the subject; these lectures are taken down and studied by the students. They are nothing like notes or abstracts as they are more elaborate than any particular book on the subject.

(2) HOSTELS AND HEALTH.

1. Our undergraduates live in boardings and messes. The college has provided no hostels for them. More than three-fourths of the Mahomedan boys of Barisal are students of the Raj Chandra College. There is a nice and comfortable boarding for them called the "Bell Islamia Boarding House" raised by public subscriptions and Government grants through the exertions of some influential members of the Mahomedan Community, and Mr. Beatson-Bell, the former Magistrate and the present Settlement Officer of Barisal. The Mahomedan students live in that boarding house and in private lodgings with guardians in most cases. The Hindu students, who do not live with guardians in private lodgings, are to live in boardings and messes. Boardings are more numerous than messes, and these boardings are more or less permanent establishments, and there is a general understanding with the managers or owners of a number of boardings that they should be solely or in some cases mainly filled with the students of the Raj Chandra College. These boardings are sometimes named after the College, and we often arrange to have the senior teachers of the Raj Chandra Collegiate School as resident members of those boardings.

2. Our professors often visit the boardings and messes to supervise their general management and direct, instruct and guide the students in all important

matters. The moral influence of this kind of visit is considerable. There is a visit book in every boarding and mess which is a record of suggestions and remarks of the visitors. The managers of boarding houses are also requested to inform us of any case of misconduct, habitual irregularity or idleness. The supervision is always native. There is no separate supervising official. Supervision work is always done by professors and senior teachers. The average number of inmates in a mess or boarding range from fifteen to thirty members. The "Bell Islamia Boarding" is large enough to contain fifty boys or more.

3. The nature of supervision exercised is to be characterised as general. The broad points can be taken care of, and it is impossible to enter into minute details :—

- (a) The items of food are inquired of and suggestions are given to the managers for the possible and practicable improvements of diet, for cleanliness in the preparation of foods and in the selection of food materials. The managers are warned against anything in the contrary, and they often comply with our request in fear of having no members from us in the future. In many cases we select lodgings for our students. All the managers of the boardings, the boarding houses, almost all the students of the college and many local guardians are known to our Secretary, and he used to visit boardings and messes occasionally.
- (b) There are no special arrangements for physical exercises in the boardings and messes. Sandow's method of exercise is adopted by many students, and they are encouraged in this direction by the visitors.
- (c) Special notice is taken of the moral conduct in messes and boarding houses through the managers, resident teachers if there are such and senior students ; and any bad conduct brought to our notice meets with adequate steps described above. The manager, the resident teachers if any and the senior students of a mess or boarding house are often instructed to keep a strict eye on those boys who are irregular in attending the classes or habituated to be abroad at unusual hours, though such cases are very few and sometimes *nil*.

4. As I have already said, there is no separate supervising official.

5. There is no arrangement of games in the college or the Boarding Houses and messes. Sandow's exercises are the only things which we find many of our students are having recourse to more or less regularly. There are athletic and sporting clubs organised with the students of the different schools and colleges of the locality by Mr. Beatson-Bell. We are much indebted to him for this, and we encourage our students to join those clubs. He arranges Cricket and Football games and matches in proper seasons, trains up the students of his club for these games and invites the students of the neighbouring places in matches with the Barisal boys. The Barisal boys go to Dacca and other places for playing matches. We contribute to the funds of these clubs.

6. A general care is taken for the health of the students in the college, the Boarding Houses and the messes. General precautions are taken against the drinking of impure water, and no cause of ill-health is allowed to exist in the surroundings of the college premises. Neatness and cleanliness of surroundings are also cared for in the cases of the Boardings and Messes. In cases of sudden illness, specially in the cases of the poor boys and those living in Boardings and Messes, the Secretary is always kind enough to see them often and help them with medicine, money and nurses when necessary. Cholera is the only epidemic to be found here. The Secretary has a hand in Homœopathic treatment though he is not a practitioner as he has no other business but the management of the college without taking anything in return for his services from the College Fund. In times of cholera-attacks the Secretary imparts necessary precautions to the students beforehand and treats cases of cholera among the students and nurses the patients himself in many cases. His energy is really untiring in these works. The Professors help him in these matters, and they are very sympathetic towards the students.

7. No encouragement is found necessary for vaccination.

8. The cases of the loss of eye-sight are rather rare among the Barisal students, there are none at present with spectacles in this college. No special care is necessary in this direction. The boys are generally warned against anything prejudicial to the eye-sight. We have writing benches like those that are generally used in the Calcutta colleges. The arrangement of light and ventilation is on the whole not unsatisfactory.

9. Consumptive tendency is almost absent from among the students here. Dyspepsia rather is a prevalent cause of ill-health. Dyspeptic students are often found and possible and practicable case in taken of them.

(3) INFLUENCE.

1. The average number of the students in the B.A. senior class is fifty, in the B.A. junior class sixteen, in the F.A. senior class hundred and fifty and in the F.A. junior class eighty. Each lecture in English in the B.A. and F.A. classes is attended by a whole class. In the case of the F.A. classes the lectures in Mathematics, Sanskrit, Physics and Chemistry are also for the whole classes. Philosophy lectures in the case of the B.A. classes and Logic lectures in the case of the F.A. classes are attended generally by three-fourths of the students of a class, the rest going to the Physical Science class in the case of the B.A. students and the Sanitary Science class in the case of the F.A. students. In the F.A. classes the lectures in History are attended by almost as many as those who attend the Logic lectures. As for the optional subjects of the B.A. students, the Sanskrit lectures are attended by more than half the boys of a class and of the rest the Mathematics class (optional and compulsory) receives two-thirds and the History class one-third. We have big classes in the subjects common to all the F.A. and all the B.A. students in the senior B.A. and the senior F.A. classes, that is, in senior B.A. English and in senior F.A. English, Mathematics, Sanskrit, Physics and Chemistry classes. The disadvantages due to this are common to all the private institutions of Bengal.

2. The habits of private reading outside the text-books are scarce among the students of this country. There are very few who have any such regular habit worthy of the name. Those who want to do so have their books selected and proper directions given by the professors.

3. The scholars have free access to their professors out of school hours. They are always welcome to the lodgings of the professors. The professors can receive and talk to their pupils privately in their waiting room. This advantage is peculiarly great in Barisal.

4. The professors and the students frequently come together in the clubs unions, associations, theological classes connected with the local Brahmo Samaj and conducted by the professors, and private evening parties and gatherings arranged by the Professors with selected students.

5. I have already said we have no hostels for our students, the professors often visit the messes and boarding houses and help the students in many ways.

6. There is no interchange of thought and influence between colleges, distantly situated though it is highly desirable and beneficial considering its moral and intellectual effects on the professors and the students.

7. A council formed by inviting one professor from each affiliated college to meet and confer together once at least every year to discuss into collegiate matters is a thing to be highly recommended. It is the educationists alone who are expected to give sound suggestions to the syndicate as to the efficient University regulations and the good management of the colleges in every respect; and such suggestions sent from them in council assembled are expected to serve the purpose of University reform best, while the suggestions sent from other quarters are liable to be more or less abstract and impracticable and may not always meet the crying necessities of the time. Much anomaly will be removed

if the examiners are selected and nominated by the Council of the professors so formed ; and those in real touch with the present system of education will in that case be appointed to set questions and examine papers in the respective subjects in which they are specialists.

8. The Council of the professors would necessarily meet in Calcutta, but it should so arrange as to send one or two efficient educationists on tour every year in the convenient time to visit the Mofussil schools and colleges, talk with the professors, teachers and students, hold high ideals and improved methods of education before them all, and thus unify and widen the influence of the University. An attempt in this direction is likely to produce highly elevated, moral and intellectual results.

(4) MATRICULATION.

We do not think that all the affiliated colleges are in a position in every way to matriculate for themselves. If that be allowed the dignity and the uniformity of standard and the respectability of the examination would be more lost than secured. The colleges conducted on commercial principles must needs first be remodelled before such a thing can be allowed. Hedging in by regulations are found almost useless when those for whom the regulations are intended are not prepared to work faithfully under them.

BARISAL ;	}	SURENDRA NARAYAN MITRA,
<i>The 16th April 1902.</i>		<i>Principal, Raj Chandra College, Barisal.</i>





सत्यमेव जयते

INDIAN UNIVERSITIES COMMISSION.

DISCUSSION WITH DR. ASUTOSH MUKERJI, LOCAL COMMISSIONER FOR THE
UNIVERSITY OF CALCUTTA.

27th March 1902.

President.—The chief object of this sitting is to hear the opinion of Dr. Mookerjee on the Calcutta evidence. We are indebted to him for the representative body of opinion which has been placed before us, and we desire to hear his opinion on it before forming our own. If there is no time to take all the points to-day, Mr. Justice Banerjee and I will again confer with the Local Commissioner and will communicate the result to our colleagues.

This Commission was appointed in very general terms to enquire into the working of the Universities. My hope is that we may be able to unite in certain main conclusions regarding their organisation and working. There is, however, hardly any point connected with University management that has not been brought before us, and hardly any of these points on which conflicting views and opinions have not been given. It is, therefore, to be expected that to a greater or less extent we may differ in our opinions on some of these points. If we find ourselves united in our main conclusions the best way to deal with these minor matters will, I think, be to state both sides without considering it in all cases our duty to record a formal opinion. So long as we can offer a combined opinion sufficient for a practical policy of improvement in the conditions and examinations of the Universities, this Commission will have answered its purpose.

TEACHING UNIVERSITY.

Dr. Mookerjee.—There is a consensus of opinion that it is desirable that the Universities should be developed into teaching Universities, but the question remains whether this is feasible. So far as post graduate teaching is concerned, there are no adequate arrangements under existing conditions. In most of the colleges, there are no classes for the M. A. students and even in the Presidency College, where there are such classes, the teaching is inadequate. When our M. A. courses were founded in 1885, they were arranged to occupy 18 months' teaching; for this purpose, whilst the B. A. examination is held in March, the M. A. examination takes place in November; but even in the Presidency College the students only receive twelve months' instruction, the reason being the insufficiency of Professors. The B. A.'s having passed their examination begin their M. A. course in June of one year. By June of the following year another set of B. A.'s are ready and the instruction of the first set must cease. The University thus prescribes an 18 months' course, and the colleges are so equipped that even the best of them can only give twelve months instruction. After the student has taken his M. A. degree there is no provision in any college for adequate instruction for higher courses such as that for the Prem Chand Roy Chand scholarship. Mr. Pedler has told us that help used to be given in Physics and Chemistry, but practically in no other subjects. For the Prem Chand Roy Chand scholarships courses are prescribed in all subjects, fuller and more advanced than those for the M. A., and students require substantial help in pursuing them. It is an admitted fact that there is need for higher post graduate teaching, and the University should make a beginning and provide instruction at any rate in subjects like Mathematics, Physics and Chemistry.

Dr. Bourne.—It seems to me that too much importance is attached to higher teaching, people even speak of classes for research.

Dr. Mookerjee.—The witnesses who spoke about research classes did not mean a class in the sense of that held for First Year students. The Mathematical graduate who wishes to prosecute original research should be placed in the hands of a man who can tell him what are the paths to be explored; otherwise he may find he is going over ground which has already been covered by others.

Dr. Bourne.—If he is good enough for research he ought to know what is the ground which he wishes to explore.

Mr. Justice Banerjee.—A student, however advanced, might not know all that has been done in the subject in which he wishes to prosecute his research and his work will be less publicly useful if he treads on ground that has already been explored.

Dr. Mookerjee.—It is for the student to judge in what general field he wishes to study. Suppose, for instance, he elects to take the theory of electric waves, it would be a great advantage to him to know exactly what has been done in that subject. Professor Lodge could tell him immediately.

Dr. Bourne.—That is because Professor Lodge knows the literature of the subject, and that is the first thing with which a student should make himself acquainted.

Dr. Mookerjee.—In theory he could find out for himself, in practice he would waste much time. In England it is different because the student would be in an environment in which he could easily learn these things. In India there are few people who can tell him.

Dr. Bourne.—In Madras a thesis is required for the M. A. examination, students come to me and ask me on what they shall write. They do not know what they are interested in and are prepared to write on any subject. They want me to feed them with the subject, the lines on which it should be treated and the books which they should read, and when they have done it they will pretend they have been engaged in original work.

President.—I never use the words “research” or “original research” when I can avoid them. These things come in when the University has done with the student. But the University can deal with what may be called advanced study when the student is not bound to classes. He should stay with a man more conversant with the subject than himself, and will gradually discover the lines on which he should pursue his own researches.

Dr. Mookerjee.—Hydrodynamics is one of the subjects prescribed for the M. A. examination but there have been no lectures on it for many years past.

Dr. Bourne.—I don't mind some advanced lectures but there should not be too many. Advanced students should not be fed like children.

President.—There are two ways in which the teaching required can be supplied (1) the appointing of men of high attainments for special subjects, (2) taking men who are at present overwhelmed with routine work, but are capable of high work, and relieving them by increasing the strength of the staff below them. I frequently hear complaints from Professors that they do not have time for the higher work they would like to do.

Dr. Mookerjee.—For the present the second course is the more practical.

Mr. Justice Banerjee.—It presupposes the efficiency of the present staff.

Dr. Mookerjee.—The staff may be taken to be equal to the work. For ten or fifteen years we did not get very good men but there has been a change during the last two or three years. Good men are coming out from England, qualified to guide students in advanced study. For instance Dr. Cullis is a Smith's prizeman who has also read in the University of Jena where he took the Degree of Doctor of Philosophy.

At any rate the Acts of Incorporation should be widened so that the present restriction may be removed. We can, perhaps, make a beginning in some subjects, though a wide extension might not at present be possible.

I was not including Law in the higher subjects. I was thinking of more advanced students in the M. A. Course, not merely of what follows the B. A. Only a small number of students will come for the higher lectures in subjects like Mathematics, Physics and Chemistry. There might be a dozen in each. It might be possible to centralise the work for all India, but I doubt it. If there were a very eminent man in Madras, our students might perhaps go there. I would gladly have done so when I was a student.

President.—In an informal way a particular study might be concentrated in one place, and we ought to consider the encouragement of intercommunication between the Universities for such purposes. But were a formal concentration proposed, a question would at once arise as to the place in which it should be carried out.

Dr. Mackichan.—The general tone of education would also be more generally raised by each University having its own higher teaching.

RECOGNISED TEACHERS.

President.—The evidence rather points to the witnesses being afraid of colleges being compelled to choose teachers out of a certain list, and it might be better to deal with this subject under the general head of "University supervision." The University may claim supervision over a college staff as well as over other matters appertaining to the colleges.

Dr. Mookerjee.—It will be very difficult to frame a list of recognised teachers in the first instance, even more difficult than it was found in London. Colleges should submit names of new professors in the same way that they have to do at the time of original affiliation. Colleges are required to send up an annual list shewing the staff of the preceding year, but this list is only used for statistical purposes and the bye-law prescribing it does not contemplate its use for purposes of supervision. The present proposal is quite different, namely, that the name of a new teacher, must be submitted to the Syndicate and must be approved by them before he is permitted to teach. There will be some dissatisfaction at such a rule, but it is nevertheless necessary.

Dr. Bourne.—The difficulty will arise in Government colleges, with respect to teachers appointed by the Secretary of State.

Dr. Mackichan.—Also in the Medical College, the teachers of which are appointed by Government.

Dr. Mookerjee.—I am distinctly of opinion that Government Colleges too require supervision in this direction.

President.—I have known appointments made by the Secretary of State in the past, with regard to which such a rule would have been very beneficial.

Mr. Pedler.—Government Colleges must be treated in the same way as others. The teachers in them should not be allowed to take up their work until the University had approved of them.

Dr. Bourne.—Objections might arise after five or six years.

Mr. Hewett.—Appointments are made in the first place only for five years. If a man had not done well during that time, he would be sent away.

Dr. Mookerjee.—It would practically be necessary to have a Sub-Committee to deal with the many applications that would be made.

President.—It will be necessary to carefully safeguard the enforcement of the penalty of disaffiliation which is an extreme one, and should rarely be resorted to.

Dr. Mookerjee.—In practice names will rarely be submitted that are not acceptable. The rule will make the colleges more careful than they are at present in the appointment of lecturers and will have a beneficial effect.

SPHERES OF INFLUENCE.

Dr. Mookerjee.—It is desirable that Ceylon and Burma should be removed from our jurisdiction. Their connection with this University affects our own students injuriously. In order to suit Ceylon we have to call for applications for admission to examinations six weeks before the examinations take place. The number of examination papers for different centres depends upon the number of candidates sent up. In order to ensure that the right number of papers is sent to and received in Ceylon, it is necessary for the Registrar to call for all applications six weeks before the examinations. That is to say teaching has to be stopped in all the schools and colleges eight weeks before the examinations.

Dr. Mackichan.—Why is that necessary? Why could not Ceylon and Burma be treated separately?

Dr. Mookerjee.—That might perhaps be done.

Dr. Bourne.—The attendance certificates may also be sent later than the names. In Madras they are sent only two weeks before the examination.

Dr. Mackichan.—I don't quite understand? why must you stop teaching a man because his name is sent in.

Dr. Mookerjee.—On account of the test examination which has to be held before the certificates can be granted to candidates.

Dr. Mackichan.—Then if a student has attended lectures after a certain date that counts for nothing?

Mr. Justice Banerjee.—How can a test examination be held before the whole course is finished? A test examination to be a real test must cover the whole course.

Dr. Mookerjee.—As nearly as possible.

Mr. Pedler.—In the Presidency College the test examination always covers that part of the course which has already been lectured on.

Dr. Mookerjee.—It would take a fortnight for the examination papers to reach from Calcutta to the most distant centres in Ceylon. Even then the Registrar would not know whether the question papers had reached.

Dr. Mookerjee.—There was a time even when the colleges in the Punjab used to be affiliated to the Calcutta University, before the Punjab University came into existence, and there are even at present some colleges affiliated to two Universities.

The President.—Yes. Aligarh is affiliated here and to Allahabad.

Mr. Hewett.—It is affiliated to the Calcutta University in only one subject, Law. Though actually affiliated in Arts, the object of affiliation is Law.

Dr. Mackichan.—The Agra College is affiliated to both.

Dr. Mookerjee.—There is only a residue now of colleges outside Bengal affiliated to the Calcutta University. There was a large number before.

The President.—We have had a number of suggestions made of creating a new University in Burma. The question is whether at this moment such a scheme is practical.

Dr. Mookerjee.—If Burma is given a University, Ceylon might perhaps go to Madras. I don't know why Ceylon does not go to Madras.

President.—It used to go to Madras. It is said that it left on account of the difficulty of the Madras examinations.

Dr. Mookerjee.—So far as Ceylon is concerned, I confess I have sometimes felt a difficulty in coming to a conclusion whether a new college from Ceylon ought to be affiliated or not, as so little is known about its local conditions.

The President.—A number of students go over from Southern India to Ceylon to avail themselves of the Calcutta University examinations.

Dr. Bourne.—There is only one college in Ceylon affiliated to Madras, namely, Jaffna. Madras proposes to disaffiliate Jaffna this year, because they have not sent up any candidates for three years.

Dr. Mookerjee.—I think Ceylon and Burma should have Universities of their own.

President.—I hoped that we should have the Ceylon case sufficiently put to us by Bishop Coplestone.

Dr. Bourne.—Ceylon being a Tamil country those who don't talk Cingalese talk Tamil. The natural conclusion is they should come to Madras.

Mr. Justice Banerjee.—It appears from the evidence of more than one witness that there was a reason why certain colleges preferred to be affiliated to certain Universities rather than to others. It is not always a Choice of examinations but a choice of centres.

Dr. Bourne.—We used to have a centre at Jaffna, but we took it away.

Dr. Mackichan.—In Bombay we have only one centre for the B.A. the number of candidates for which is about 600 or 700.

Mr. Justice Banerjee.—Calcutta has been more considerate to affiliated colleges. That may be one reason why its sphere of influence has extended to a larger area.

Dr. Mackichan.—Nagpore used to be affiliated to Bombay, but Calcutta gave Nagpore a centre which Bombay never did.

Dr. Bourne.—The question of inter-University rules comes in here: whether candidates who have matriculated in one University should be allowed to go on to the F. A. of another University.

Dr. Mookerjee.—Under existing conditions of things that depends upon each University.

Mr. Pedler.—It would be better if there were a general policy as regards this.

INTER-UNIVERSITY RULES.

Dr. Bourne.—Madras will not allow Calcutta matriculates to enter for their examinations.

Dr. Mackichan.—They have excluded the Matriculation examinations of all Indian Universities, unless very special reasons are shewn in individual cases.

President.—It turns upon the difficult question of making the examinations of the different Universities equivalent as far as possible. If the tests were the same I would be in favour of free recognition of one University's examinations by another.

Mr. Justice Banerjee.—If the standards were made the same it would prevent unseemly conflict between the different Universities. That is a very desirable thing.

Dr. Bourne.—Not only the standards, but the general scheme of examinations would have to be the same. Each University has an ideal course beginning at the Matriculation and passing on. These courses would have to be the same.

Mr. Pedler.—We don't want to have the courses of each University rigidly the same. I would not make too hard and fast rules.

Dr. Mookerjee.—A great deal has been said about equalising the standards of different Universities. With great respect to the gentlemen who hold that view, I must say that is an ideal that can never be realised. In 1857 the Universities started with courses very similar in Calcutta, Madras and Bombay; in 1902 we find they have gone on different lines. If you make them equal in 1902, in 1925 you will find they have gone on different lines again. It must necessarily be so. I think it desirable to leave freedom to the Universities so far as details are concerned.

Mr. Justice Banerjee.—Would you have the examinations of one University recognised as practically equivalent to corresponding examinations of other Universities for the purpose of admitting candidates to the next higher examinations?

Dr. Mookerjee.—That must depend upon individual cases. The policy of the Universities ought to be one of inclusion and not exclusion, but I would leave individual cases to each of the Universities. With regard to the matriculation, I think it is quite easy to have an equal policy.

Mr. Pedler.—The general policy of the Calcutta University has been to accept, say the Entrance examination of another University, and tell the candidates "you can go up for the F.A., provided between the Entrance and the F.A. you abide by our rules."

Dr. Mookerjee.—That is you say to such a candidate "if your training is not precisely similar to our Entrance training, well if you go through our course it will qualify you to pass our F.A., and we will allow you to do so." If a man is qualified to pass the F.A., we allow him to do so. The same thing holds for other examinations, whereas if a man has passed the F.A. in Calcutta he cannot read for the B.A. in Madras.

Dr. Bourne.—No.

Dr. Mookerjee.—Take for instance again the case of the Madras B.A., he may get his degree in English, vernacular and one other subject. One of our B.A.'s, if he has taken up Mathematics, has to take up English and also Science, whereas a Madras B.A. takes either Mathematics or Science, and yet the Calcutta University always recognises the Madras B.A. for the purposes of their examination.

Mr. Justice Banerjee.—Frequently men come from Madras to go up for the Calcutta M.A. Nearly 200 M.A.'s pass every year from Calcutta.

Dr. Bourne.—Altogether we have only 50 M.A.'s in Madras. I suppose the examination is easier in Calcutta.

Dr. Mookerjee.—That is only an assumption. It shows rather a higher state of culture here than in Madras. I know of several Calcutta M.A.'s who are teachers of repute in Madras.

Dr. Bourne.—Students won't go up for our M.A., they ask to go to Calcutta.

Dr. Mookerjee.—So far as certain subjects go, our M.A. standard, to put it mildly, is certainly not lower than the Madras standard. A man who has got a first class in Mathematics in the Calcutta University is equal to any other M.A., either of Madras, Bombay or Allahabad.

Dr. Bourne.—In Science, practical work presents no difficulty here.

Dr. Mackichan.—I think the practical work in Calcutta is easier than in Bombay.

Dr. Bourne.—What is happening to-day in Calcutta in the first B. Sc. examination? I understand you are having a sort of paper instead of practical work, because the students have no opportunity of learning practical work.

Dr. Mookerjee.—This is the first year of the B.Sc. you must remember.

Dr. Bourne.—I am not complaining of the regulations for the B. Sc., but the way, I understand, they are likely to be carried out.

Dr. Mookerjee.—The University can only frame regulations and appoint examiners. If the examiners don't do their work, what is the University to do?

The President.—We seem to be agreed that as far as they are equivalent, the tests of one University ought to be accepted by another.

CONSTITUTION OF THE SENATE.

President.—Here, as elsewhere, we have a general admission that the Senate is too large, a general disposition to recommend a smaller Senate, and a general indisposition to tell you how it is to be done.

Dr. Mackichan.—That has been more marked in Calcutta than elsewhere.

Dr. Mookerjee.—Speaking for myself, I would be in favour of a drastic change, only if it were practicable. Its practicability depends upon two things: (1) Is Government prepared to undertake it, which means practically the Chancellor and his advisors. Then, (2) is it possible to have, not one man, but any body of men who will judge of the qualifications of gentlemen who are already Fellows, and decide who ought to be retained and who should go out. It might imply censure on those in the Senate, and would necessarily involve a serious reflection on those who have appointed our Fellows in the past. Speaking for myself, I certainly would decline to undertake the task. I don't know many of the persons and what their qualifications are. If it were possible, of course, I would have no objection to it.

Mr. Justice Banerjee.—What should be considered to be the right number?

Dr. Mookerjee.—If it were a question of whether it should be 200 or 150, I would not be in favour of any drastic change; if it were a case of whether it should be 200 or 50, that certainly would be a case for drastic measure. If a small reduction is to be made, I think it is fair to leave it to the operation of natural causes.

Mr. Justice Banerjee.—As for what Dr. Mookerjee has said that any drastic change might imply censure upon those men already in the Senate, there is also this view that might be taken of it. The action of any authority or body of men with regard to anything is regulated by the environments of the question at the time. At the time when the University was first established there were not many colleges, nor students, nor Fellows, and the aim was to enlist more men as Fellows, to widen the sphere of influence, to affiliate many colleges, and to secure a larger body of students for the University Examinations. That was one aim and I should say it was the natural direction of action at the time. Things we now find have gone far enough in that direction and it may be necessary to give our action a different turn. Is not that what must happen in regard to every department of human action? And if that is so, we may act without fear of being accused of censuring the discrimination of our predecessors, because we now venture to do things they did not then think it right to do.

Dr. Mookerjee.—It implies a certain amount of censure which could not be implied if it could honestly be said that every one of the 180 members of the Senate is a gentleman qualified to be a Fellow of the University. If that could be said, I would perhaps be prepared to say that 180 experts would make a most excellent Senate, but my impression is that some of these gentlemen are people who ought never to have been there. Not only is it the case that they are not experts, but they take no interest in educational matters and are not qualified to do so.

Dr. Mackichan.—Have we not sufficient evidence before us to show that it is more a question of class qualifications than individual qualifications? The complaint is that we have not a sufficient number of educational experts

on the Senate. We don't wish to say that one man is fit and another is unfit. We say you don't belong to a certain class, you are not the kind of man the University needs for the work which is now agreed should be done by the University. That is rather the point of view from which I should look at it.

The President.—I should like to put before the Commission what has passed through my own mind on the question. It seems to me, supposing that the Commission should come to the conclusion that some drastic change is required for which we cannot trust to the lapse of time, that the simplest way to effect the change would be this : to enact that the Senate shall consist not of the whole body of Fellows, but of such Fellows as shall be nominated from time to time by the Chancellor for the purpose. That leaves the distinction of being a Fellow of the University exactly where it is ; but a fellow will not be a member of the Senate unless nominated for the purpose. I would make the nomination for a period of some years and that would take away a part of the sting in the case of men who are left out. A man who is not put into the Senate on the first occasion, will think that an opportunity will occur, when the Chancellor may put him in.

Mr. Justice Banerjee.—When the University was first incorporated the number of unaided private colleges was very small ; now their number has very considerably increased. That introduces an additional element of those who are entitled to some representation, and may account for the larger proportion of the non-official element in the present Senate.

Dr. Mookerjee.—Considering what has been said about the need for a larger number of persons actually engaged in teaching and that some witnesses have gone so far as to say that they should have an absolute majority, it is desirable to see how many persons on the original Senate were actually engaged in teaching, and how many there now are on the Senate.

President.—I have prepared a list and I find in the original Senate there were three officials besides *ex-officio* Fellows ; five Ecclesiastics ; five soldiers ; five medical men, one being a Professor of the Medical College and one the Curator of the Botanical Gardens ; four officers of Public Instruction ; three heads of colleges, two of them being natives of India ; and one Judge besides the Chief Justice, and one pleader besides the Advocate-General. In the present Senate we have six officials beside *ex-officio* Fellows ; eight Judges, besides the Chief Justice ; three officers of Public Instruction ; 11 teachers in colleges ; 12 medical men ; 40 members of the legal profession ; 8 engineers ; and 11 Ecclesiastics.

Dr. Mookerjee.—In the Faculty of Law, one branch of the profession, namely, barristers, is practically not represented. Mr. Dunne is the only barrister on the Faculty ; even the Advocate-General is not a Fellow of the University. I consider the exclusion of barristers extremely unfortunate.

Mr. Hewett.—Ten years ago there were a certain number of barristers in the Senate.

President.—When I wrote this note there were only two English Barristers on the Faculty of Law, namely, Sir Griffith Evans and Mr. Dunne. Sir Griffith Evans is now dead.

Mr. Pedler.—Within the last few years the appointments of European Doctors as Fellows have been extremely few.

Mr. Justice Banerjee.—I don't think they are so badly represented.

Mr. Pedler.—Now they are better represented, but two or three years ago it was not so.

Dr. Mookerjee.—You have Dr. Dyson and Dr. Harris.

Mr. Pedler.—They are new creations.

President.—In Bombay there are many Doctors on the Senate but they don't agree. We have had some leaders of the profession come and practically attack the Medical College.

Dr. Mackichan.—The Medical Faculty has been the most lively Faculty in Bombay.

President.—The Chancellor might nominate so many to represent Government Colleges, endowed Colleges, the Medical faculty, the Engineering faculty, and so on.

Mr. Pedler.—How would you arrange about election ?

President.—The election would be a mere election to a fellowship. A fellow would not be a member of the Senate unless nominated by the Chancellor.

I would have all nominations made by the Chancellor. That would not necessarily give arbitrary discretion to the Chancellor. If it is ruled that two fellows must be appointed to represent the Medical Faculty the Chancellor must nominate two eminent doctors.

Mr. Pedler.—What would the excluded Fellows do?

President.—Nothing at all. They could come to Convocation if they liked.

Dr. Mookerjee.—Sometimes, at present, they do more than that. Some of them are very unwelcome visitors. They might, perhaps, be allowed to retain the privilege of electing a Representative to the Bengal Council, and also perhaps of electing a portion of the new Senate.

Dr. Bourne.—It is curious that not a single witness has suggested re-distribution of power in the Senate.

Mr. Justice Banerjee.—The only near approach to that was the suggestion taken from the printed note that the rule which requires that every Fellow must belong to some faculty should be abrogated. In that way, the real work of the University, being centred in the Faculties and in the Syndicate, would be done by working members and the others would simply enjoy the honour of being members of the Senate. Of course the ultimate appeal would still lie to the Senate where the fellows excluded from the Faculties would come in and exercise their powers of voting.

Dr. Mackichan.—Would you have Maharajahs in the Senate.

Dr. Mookerjee.—With regard to the existing Fellows, these Maharajahs do nothing. They neither take any interest in education nor give anything to the University. If a Maharajah comes forward and gives us 10 lakhs of rupees we would do anything for him, even make a statue to him.

Mr. Justice Banerjee.—Our present Senate consists of about 180. How many educationalists are there in it?

Dr. Mookerjee.—In recent years Government has not appointed as a rule, teachers actually engaged in teaching especially in the Arts subjects.

Mr. Justice Banerjee.—One reason sometimes assigned has been this, that as many of them, so far as private colleges are concerned, are M.A.'s of this University they must look to election for their entrance into the Senate, nominations being reserved for others who cannot enter by that door.

Dr. Mookerjee.—That does not apply to Professors in Government Colleges.

President.—To sum up the discussion, Dr. Mookerjee, what course would you advise us to take with regard to the Senate?

Dr. Mookerjee.—To reduce the number, to certainly not below 100 and not more than 150.

Mr. Justice Banerjee.—By what process?

Dr. Mookerjee.—That I really cannot answer.

Dr. Mackichan.—That is a question for University research.

Mr. Justice Banerjee.—How do you think the plan would work which was suggested by the President?

Dr. Mookerjee.—That might do, but the principal objection to it would be that if the Government of India alone nominate from a general body of Fellows the members of the Senate for the time being, that would mean practically terminable Fellowships or rather terminable memberships of the Senate, to which I have a strong objection. If it were done for life or, if the body of Fellows were authorised to elect a certain portion of the Senate then I would not object to the proposal.

Mr. Justice Banerjee.—Don't you think it would be viewed by many, especially by private colleges, as having the effect of making the University an official body.

Dr. Mookerjee.—I think that the Government of India would arrange for a fair representation of private interests on the Senate. I am assuming that as a matter of course.

Mr. Justice Banerjee.—Do you think the different representations should be determined on a statutory basis? Would you not have a general list of Fellows and then suggest that out of that list of Fellows certain persons should be members of the Senate, or would you leave it to the Chancellor's unfettered and unqualified discretion?

9.

Dr. Mookerjee.—Principles of representation might perhaps be fixed, but I must confess I have not much faith in statutes.

TERMINABLE FELLOWSHIPS.

Dr. Mookerjee.—I am not for terminable Fellowships or terminable memberships of the Senate, and I have no doubt that if that principle were introduced it would seriously affect the independence of the members. For instance, if a high official and his subordinate were on the Senate, speaking of European gentlemen, a subordinate would not like to oppose his superior.

Dr. Mackichan.—If there is any difficulty of that kind, might not it also apply to life-Fellows?

Dr. Mookerjee.—If you have terminable Fellowships the difficulty would be intensified, because a man who opposed his superior would have little chance of re-election, and if some members are re-appointed and others are not, those who are not re-appointed will be considered to be incompetent. To avoid that result, a shrewd man might subordinate his genuine interest and adjust his conduct so as to secure a chance of being re-appointed.

Dr. Mackichan.—Are there not considerations on the other side. Are there not men who are likely to suffer rather than act as you suggest, and whose position and influence would be increased by having opposed recognised authority.

Mr. Justice Banerjee.—Yes, that would be so in cases of great public interest, but in ordinary matters it would not be so.

Dr. Mackichan.—I think the appointing authority would be as a rule extremely careful to re-appoint these men. Government would never condescend to remove a man for a thing of that sort.

Dr. Mookerjee.—Not so much for opposing Government interests, but rather for opposing those in authority from whom Government must derive its information. You must take men as they are.

EX-OFFICIO FELLOWS.

Dr. Mookerjee.—As to *ex-officio* Fellows it is suggested that the Director of Public Instruction should be an *ex-officio* Fellow. In that case you would have to put in not only the Director of Public Instruction, Bengal, but also the Directors of Public Instruction in Burma and Assam. The Directors of Public Instruction in Bombay and Madras are *ex-officio* Fellows, and I have not been able to find out any reason why this has not been done here, but it is not a matter of consequence, as the Director has always been on the Senate. My suggestion is that if the Director of Public Instruction, Bengal, is an *ex-officio* Fellow, the other two Directors of Public Instruction, namely, of Burma and Assam, should also be Fellows. The Advocate-General should also be an *ex-officio* Fellow.

Mr. Pedler.—The Principal Medical Officer?

Dr. Mookerjee.—That is hardly necessary.

ELECTIONS.

Dr. Mookerjee.—I think that elections should be continued, but I think it is desirable to introduce limitations both as regards the electorate and the candidates for elections. As regards the electorate, I think there ought to be a register of graduates qualified to vote and that no graduate should be entitled to have his name on such register unless he has paid a certain annual fee. I may suggest that if a fee of Rs. 10 is charged it would be quite possible to give a copy of the calendar and a copy of the minutes to these registered graduates, and that might make them more familiar than they now are with the proceedings of the University. As regards qualifications for the electorate I would insist that graduates should have obtained the degree of M.A. or some corresponding high degree in the other Faculties. Then, as regards candidates, the qualification which has been demanded in the past is, I think, too low. The qualification which has hitherto been demanded from a candidate for election has been the same as that for the electorate, namely, the M.A. or some similar degree in the other Faculties. I think that is too low. I would restrict candidates to the following classes, either M.A.'s who have passed their

examinations in the first class or Prem Chand Roy Chand students or holders of the degree of Doctor or Master in the other Faculties, *viz.*, Doctor of Law, Master of Engineering, Doctor of Science and Doctor of Medicine. As regards the limit of five years, I am not particular about that, you may put that on, but I don't think any ordinary M.A. of less than five years' standing would have any chance at all. It has been suggested to me that these limitations might exclude some very desirable men who are teachers. For instance, there are good men who are members of colleges and have obtained only a second class in the M.A. examination. I would therefore add also M.A.'s actually engaged in teaching for a period of ten years. I would exclude B.A.'s so far as Calcutta is concerned. We have 1,200 M.A.'s of this University.

Mr. Mackichan.—Supposing a B.A. in after-life distinguished himself, would you not have him as a member of the Senate?

Dr. Mookerjee.—He might be nominated by the Chancellor. If you once open the door you would get in as candidates very undesirable men.

Dr. Mackichan.—Is it safe to play nomination and election one against the other.

Dr. Mookerjee.—Government might see that the door is open for such men to get in.

Mr. Pedler.—Take for instance Chander Mohan Bhaduri. He is one of the men who ought to be elected. The only other way of doing it would be to put in men who have made substantial contributions to either Literature or Science.

Dr. Mookerjee.—Such a test would be too vague.

Dr. Mackichan.—I think the important thing is to have restrictions on the electorate, not so much on the candidates. Don't you think the majority of M.A.'s must have given proof of some superior qualifications?

Dr. Mookerjee.—Not so far as the University is concerned. So far as the University is concerned, a man who has taken a first class in the M.A. has given sufficient proof of his attainments.

Mr. Hewett.—We want to get people who are interested in the University, and that is the object of your restriction.

Dr. Mookerjee.—Yes.

President.—Would you exclude graduates of foreign Universities?

Dr. Mookerjee.—That might be done perhaps if the number of places to be filled was very large. Ordinarily we elect two or three in a year; it is supposed that Government will look to the interests of education and appoint European Professors, and graduates will take care of themselves and send their own representatives to the Senate. Of course in practice if a large number of Fellows were to be elected, all these questions might arise. I am assuming that only a very small number will be allowed to be elected by the graduates.

In Allahabad election is by the Senate, and it has been explained that the rule was introduced because they have not yet got a body of graduates who could be entrusted with the duty of elections, *i.e.*, they have not a sufficiently large number. It is a curious fact that in 1890 when our Senate was considering this matter, one of the motions brought before the Senate was that the election of Fellows should be not by graduates, but by the Senate and the Senate rejected that motion and the motion which was carried was that the election should be by the graduates and not by the Senate. The elective system, so far as Calcutta is concerned, has on the whole worked satisfactorily, but it has to be admitted that better men might have been returned in some instances. Unfortunately better men have been kept back either because they would not enter into contest as the electorate was too large or because some of the elder men had no inclination. There has of course been a good deal of canvassing. I think the main defect in the past has been that before a good person could make up his mind to be a candidate he has to find out where all the graduates forming the electorate live, even if he does not take to canvassing.

Mr. Pedler.—A suggestion was made to us that a list of graduates is kept in the Bar Library?

Dr. Mookerjee.—There is no foundation for that, but I know of two candidates who prepared such lists. They are not members of the Bar Library. I suppose Mr. Pedler means to suggest that this gives an advantage to members

of the Bar. The two gentlemen I am speaking of both belonged to colleges. I think if the University kept a list of graduates, it would be possible to exclude people who really did not take an interest at all in education.

SYNDICATE.

Dr. Mookerjee.—I think that so far as our University is concerned the number we now have on the Syndicate, *viz.*, ten, is sufficient. Perhaps it might be raised a little by bringing in two members of the Faculty of Engineering instead of one. If there is a Faculty of Science the number of representatives of the Faculty of Arts would have to be reduced. In my opinion there ought to be a Faculty of Science. I am not quite sure whether I would not have our Faculty of Science of the same type as the Faculty of Arts. I would not have a rule that you could not belong to two Faculties. As to the question whether Government is adequately represented on the Syndicate, if that means whether Government is in certain educational interests adequately represented, I say yes. The Director of Public Instruction has always been a member of the Syndicate, and I cannot conceive of a Faculty of Arts which would make any difficulty in sending the Director of Public Instruction to the Syndicate.

Dr. Mackichan.—What about 1925? Things may be quite different then.

Dr. Mookerjee.—I cannot conceive it. The circumstances will have to be changed considerably. It will either have to be a very bad Faculty of Arts or an exceptionally bad Director of Public Instruction. If you once make the Director of Public Instruction an *ex-officio* member of the Syndicate, the question must necessarily arise why should not other interests be equally represented there, and then you will have to turn the whole Syndicate into an *ex-officio* body. Private colleges would say, we are entitled to have our representatives as a matter of course on the Syndicate; missionary colleges would say the same thing; the Medical College would say the same thing. We have already one Medical College, we might get another. Then the question would arise, whether Government and the private medical college were both entitled to representation on the Syndicate. In Law the same question would arise. I don't think as far as our University is concerned, any case has been made out for a change. Of course everything is possible. So far as colleges are concerned, they are fairly represented on the Syndicate, but not perhaps always adequately. But I altogether dissent from the views of those who say that the representatives of the colleges ought to have an absolute majority in the Syndicate. I think that would not be to the best interests of the University. My own experience has been that whenever any reforms have been attempted to be introduced in the University which have affected the colleges, the opposition has come in most instances from the college authorities themselves. On many occasions they have succeeded in postponing reforms for a time. There would not have been this opposition if all our colleges had been endowed institutions. I will give you one illustration in point. About 1892 a motion was brought before the Senate that the teaching in schools recognised by the University ought to be improved, that the classes were too large, that no individual attention was paid to students and that some limitation ought to be put upon the number of students in the classes. There was some opposition on the part of school and college authorities, but in spite of this opposition a motion was carried that there should be not more than 50 students in each class. That resolution was sent up to the Government of India, and it was ratified. The Syndicate attempted to enforce that rule in the schools which applied for recognition and also in the existing schools, but the heads of all colleges in Calcutta, except the Presidency College, joined and sent a memorial to the Vice-Chancellor representing that they would be pecuniarily affected by this rule and asserted that the University had no business to meddle with the administration of either colleges or schools; the whole question was re-discussed and the former resolution rescinded, and I am sorry to say that the resolution by which the former resolution was rescinded, was sent up to the Government of India, and the Government with equal readiness, confirmed it. To take a second illustration, Mr. Pedler will perhaps remember that when he attempted to have practical teaching and practical examinations in Chemistry for the B.A. Honours, there was serious opposition.

which came mainly from the private colleges which would have been affected by that change, and it was with the greatest difficulty that it could be carried. There have been many such occasions, and my idea is that although we must necessarily have representatives of colleges on the Syndicate, there must be independent men who understand something about education also on the Syndicate to exercise control over these colleges, and that things will go from bad to worse if these colleges are allowed to have an absolute majority. The point I desire to emphasize most clearly is that in this country there is often a distinct conflict of interest between the teacher and the student, and that this conflict is bound to continue so long as we do not get more endowments and a larger number of superior teachers. At the same time I think it desirable to provide that the colleges should be represented on the Syndicate and that it ought not to be left to mere chance, and I would suggest that out of the five representatives of the Faculty of Arts three should be persons actually engaged in teaching, including under that category the Director of Public Instruction, and out of the two members sent by each of the Faculties of Law, Medicine and Engineering, one should be a practical teacher. That would practically give five teachers and the Director of Public Instruction on the Syndicate out of a total of eleven members.

Mr. Pedler.—In the case of Engineering we have only once had a practical teacher of Engineering on the Syndicate since the University was started. I refer to Mr. Slater.

Dr. Mookerjee.—Sometime ago Mr. Justice Banerjee will remember that a Committee was appointed by the Senate to report upon the B.A. examination. There was a great deal of discussion as to how teaching in the colleges could be improved, and we had a large proportion of teachers on the Committee including the Principal of the Metropolitan College, the Principal of the Presidency College, and the Rector of St. Xavier's. One of the points suggested before the Committee was that students required not only to be lectured to, but to be tested frequently to ascertain whether they are profiting by these lectures or not. Every one admitted this to be a good suggestion, but every one, I am sorry to say, did not support it. The Principals of the Colleges said "we cannot have it, it requires an additional staff;" and even the Principal of the Presidency College said "where am I going to get the staff," and as a matter of fact Mr. Justice Banerjee's suggestion fell through.

Mr. Justice Banerjee.—It was carried in the modified form that certificates should be signed by the head of a college that the candidate for an examination had satisfied the head of the college by undergoing some test that he had made sufficient progress in his class.

Dr. Mookerjee.—I know that there is an agitation being got up now to oppose that part of the report of the Committee, when it comes before the Senate, which contains a suggestion that there should be a limit of 60 in school classes.

Dr. Mackichan.—A good deal of the opposition you refer to would perhaps be explained by the unwillingness of college authorities to take directions from the Syndicate as to the details of their teaching.

Dr. Mookerjee.—Not merely that. I think if these were endowed colleges and had plenty of money and had not to live upon their own profits, they would not object. I am referring so pointedly to this matter because a great deal has been made about the inadequate representation of colleges, and it has been suggested that the management of the University has got into the hands of lawyers and non-experts. That is true to some small extent, but the evil has been grossly exaggerated. I am quite willing to admit that colleges ought to be represented, but I think it equally necessary that there should be some independent men who take an interest in education on the Senate.

At this stage the Commission rose for lunch. After lunch the discussion was continued.

Dr. Mookerjee.—As regards the Syndicate I have two other points to urge. It is suggested that not only should the colleges be generally represented on the Syndicate, but that different classes of colleges should be adequately represented. For instance, it is said that mofussil colleges and private colleges should have representatives on the Syndicate. I don't think it is practicable or desirable to have that. Do you think that there is any conflict of interests between the different classes of colleges so far as the University is concerned?

If you once begin to recognise that principle, we shall not know where to end. For instance, so far as private colleges are concerned, it might be said that some of them are native colleges, some of them are Missionary colleges. Again as regards the Missionary colleges it might be said some of them belong to one class and some to another, and I have no doubt once you begin to recognise class representation, you would find too many classes to deal with. As regards mofussil colleges which belong to Government they are adequately represented by the Director of Public Instruction, and so far as mofussil colleges which do not belong to Government are concerned, they stand in no different footing from the private colleges in Calcutta. If we have teachers adequately represented on the Syndicate, I think that ought to serve our purpose. I don't think any distribution amongst the different classes of colleges necessary.

Dr. Mackichan.—If the Syndicate is to control colleges, the colleges ought to have representatives on the Syndicate so as to make the control practicable. If you don't recognise any distribution in the representation a difficulty like this might sometimes arise. If the educationalists on the Syndicate are only professors of one class of colleges and that class Government colleges, it might give rise to the feeling that the University is solely a Government institution.

Dr. Mookerjee.—If there is to be any distinction between colleges, the distinction between the mofussil colleges and the Calcutta colleges is not a well-founded fact. The only distinction which can be urged is the distinction between Government colleges and non-Government colleges, and if class representation is at all to be recognised, I would be in favour of some seats on the Syndicate being reserved for teachers in non-Government colleges.

Mr. Pedler.—What are the differences between Government and non-Government Colleges?

Dr. Mookerjee.—I am afraid they cannot be accurately defined. There may be this difference when it comes to a question of finance, Government Colleges may say we have to do these things and Government has to find the money, but private colleges cannot say that.

Mr. Pedler.—Except in this that we are kept down very closely in regard to money. I cannot increase the expenditure by one rupee without obtaining the consent of Government.

President.—If the Government suggests a rise of pay to a certain class of teachers, it must find the money.

Dr. Mookerjee.—I would perhaps also point out that if this principle of class representation is once recognised we shall find ourselves in serious difficulties about examiners. My own experience extending over 13 years has been that if you have on the Syndicate a large number of Government professors, examiners will be confined to that class.

Dr. Mackichan.—Might it not be a fair representation of all colleges?

Dr. Mookerjee.—That has not been my experience.

Mr. Justice Banerjee.—Putting it on another ground which implies no imputation of any improper sort in any degree, a Syndic might say: "I know these men. I know they are fit men, and not knowing the others I cannot vote for them. I will vote for the men I do know."

Dr. Mookerjee.—I will take a concrete illustration of what happened in our examinations before 1879 or 1880, before we had any large proportion of native members. The Examiners appointed then were mostly gentlemen connected with Government colleges, for the obvious reason that each Syndic who was a Government Professor, knew his own men, whereas he did not know one way or other about men in private or Missionary colleges, with the exception of a few great men of established reputation belonging to non-Government colleges who could not be passed over.

STATUTORY BASIS.

Dr. Mookerjee.—As to placing the Syndicate on a statutory basis, if this means that the constitution of the Syndicate is to be set out in the Act of Incorporation, I am opposed to it, unless the constitution is made a very elastic one.

President.—I think this is suggested because everything the Syndicate does may be brought up on appeal to the Senate. Would you give the Syndicate any independent power?

Dr. Mookerjee.—If the constitution of the Senate is altered, I don't see any reason why the Syndicate should not, in theory at least, be subordinate to the Senate. My own idea is that the Syndicate will do its work much better and more carefully if it finds that its decisions are liable to be challenged before a higher body. On the other hand, if the Syndicate finds its decisions on certain matters final, I am afraid that the Syndicate may do things which will not stand scrutiny. Besides the constitution of the Syndicate must be determined by the bye-laws, and the bye-laws of course have to be framed by the Senate, but have to be confirmed by the Governor-General in Council. Therefore, ultimately, the constitution of the Syndicate must depend upon the Government of India. The only difference will be that if you put it into the statute, you may not change it for the next 30 or 40 years. If you have the constitution determined by bye-laws and then find it necessary to change you may do so without any difficulty. For instance, if you accept my suggestion that three out of five members from the Faculty of Arts should be teachers; suppose you practically find that is not sufficient, and you wish to make it, say four out of the five, if it is once put in the statute, you will not be able to change it for the next quarter of a century.

FACULTIES AND BOARDS OF STUDIES.

Dr. Mookerjee.—The first suggestion with regard to this is that the rule which requires that every Fellow must be assigned to a Faculty may be abrogated. That by itself would not be sufficient. I admit there are members of the Senate who are not qualified to be members of any Faculty, but if you have a rule that it is not necessary for every member of the Senate to be a member of a Faculty, you must have the other rule, as in Allahabad, that number of members in each Faculty should be limited. If, as under our rules, each Faculty may consist of an indefinite number of persons, then although it will not be necessary under the rules to appoint every Fellow a member of a Faculty, still it would be open to any Fellow to get himself elected; that happens very often now. At a meeting of the Senate some gentleman gets up and says so and so should be a member of such and such a Faculty, nobody wants to oppose such a resolution because it looks like a personal question. I am afraid it will not be sufficient simply to say it is not necessary that every member of the Senate should be a member of some Faculty. You will have to fix a maximum number for each Faculty.

Mr. Justice Banerjee.—How will it work if the constitution of the Faculty be left to the Syndicate.

Dr. Mookerjee.—It will never work.

There is another suggestion of adding recognised teachers and graduates with honour's in the special subject of the Faculty. I am opposed to that. I am opposed to the incorporation of strangers in the Faculties. If recognised teachers and graduates with honours are worthy to be members of a Faculty, they ought to be made members of the Senate first. Otherwise the consequences might be something like this: suppose a proposition is put forward before the Faculty of Arts. There the recognised teachers and graduates with honours are present, and of course they have their votes, and carry a certain point. When it comes before the Senate these teachers and graduates are absent, and the Senate upsets the whole thing.

It is also suggested that when Fellows are elected, the election should be by Faculties, not by the general body of graduates. I am opposed to that also. If there is to be an election, which, I think, there ought to be, it ought to be by the graduates as one body.

REVOCATION OF DEGREES.

I think the Senate ought to have the power to take away degrees, if the graduates have been convicted of certain specified criminal offences. Of course I cannot now go into the question of what those offences should be. That might be considered hereafter.

Dr. Bourne.—Only the other day there was a case in Madras when a man tried to pass the B.L. by fraud. A question arose as to whether his B. A. should be taken away, but nothing was done.

Dr. Mookerjee.—I would not allow the Senate to take away a man's degree until he has been convicted by a Criminal Court. I don't think the Senate is a body which can judge of the facts of a case.

Mr. Justice Banerjee.—You say "certain specified criminal offences."

Witness.—Yes, because there are criminal offences which don't involve any moral stigma. For instance, a case of simple assault, where a man loses his temper. We are all apt to lose our tempers.

Dr. Bourne.—What is the object of all this? You could not prosecute a man for calling himself B.A., nor could you say that he has not passed a certain examination. Besides, what is a degree after all?

Dr. Mookerjee.—Take, for instance, the degree in Law. If you deprive a practising lawyer of his degree, you make it impossible for men to practise his profession.

Dr. Bourne.—What about Fellowships?

Dr. Mookerjee.—The Chancellor can deprive a man of his Fellowship with or without conviction. It was done in a well-known case in Bombay, the case of Tilak.

BOARDS OF STUDIES.

As regards Boards of Studies, they do their work fairly well, although, in some cases, there are members of particular Boards who perhaps should never have been there. As a rule, I cannot find that decisions of our Boards of Studies are unfair or unjust. Perhaps books are prescribed which ought not to have been prescribed, and if careful enquiry is made into the matter it will be found that this state of things is due not to the absence, but to the presence, of too many experts, and my own experience of more than one Board of Studies has been that when reforms have to be introduced either in the course of studies or in text-books, opposition comes first from teachers. I will give concrete instances. Take, for instance, the Board of Mathematics. You have there people who were in college in England many years ago and who there read a particular text-book. They come here and find also that book is used as a text-book in this University. They work up all the examples and later on when a new text-book comes out, they admit it is a much better one, but they say "we cannot take it now. Surely you cannot expect that we should go on reading these examples and working them out." The new book is put aside. Two years after a book of solutions is published. Opposition vanishes and the new book is placed on the list of text-books. Take, for instance, Dr. Salmon's Conic Sections. Dr. Salmon happens to be a Dublin man. Unfortunately we have not many Dublin men on our Boards of Studies. This book has been prescribed by the University, but systematically ignored by the Professors and an inferior book is brought in.

Take again the Board of Studies in English. You will find the same text-books if you take a cycle of ten years. You will find the same books going in rotation, and if you ever make an attempt to introduce a book which has not been annotated, objection comes very strongly from the teachers. Take, for instance, even a book like "Milton's Paradise Lost." Only those particular books of which annotated editions have been published are prescribed, and books without annotated editions are not prescribed. There is a liking for annotated editions published by certain publishers, and sometimes you will find in our Calendar editions mentioned of Burke's speeches on American taxation, though Burke can be read in any edition.

Dr. Mackichan.—They recommend a particular publisher. That no University should do. What leads them to recommend these editions?

Dr. Mookerjee.—There is always a good deal of canvassing. You have heard of canvassing for election of Fellows, and for memberships of the Syndicate; there is also a good deal of canvassing so far as the selection of text-books is concerned. Members of the Syndicate are approached by agents of publishers, and I find they are often forced to yield. I repeat here what I have said about the constitution of the Senate, that there should be on every Board of Studies men actually engaged in teaching, but at the same time there must also be men who are experts in these subjects, but who are not teachers. The only other alternative that has been suggested to election by Faculties is that Boards of Studies should be constituted by the Syndicate. I don't think that would mend matters.

Dr. Mackichan.—I am rather surprised by these statements you have made. No teacher or professor in Bombay would be affected in the slightest degree by having annotated editions or not having annotated editions.

Dr. Bourne.—No considerations of that sort can ever weigh in Madras.

Dr. Mookerjee.—Of course, if you had for your teachers only first rate men and men willing to take some trouble, there would be no difficulty. A first rate man, if a suggestion is made that such and such a book ought to be substituted as a text-book in the Chemistry course for the book he has been teaching for the last five years, will raise no objections. He will take trouble and read this new book through. At present teachers and professors encourage annotated editions by writing them.

Dr. Mookerjee.—Then again take, for instance, the Board of Studies in Sanskrit. Whenever a suggestion is made for a change of text-books, opposition comes in the first instance from people actually engaged in teaching these books. This does not, however exist to the same extent in the Sanskrit Board that it does in the English and Mathematical Boards of Studies.

GRADUATES.

Dr. Mookerjee.—As to the register of graduates, I have already expressed my views.

As regards the suggestion whether Universities should be empowered to confer the M.A. or other suitable degree on recognised teachers, who come from other Universities, I don't see any objection to that. I would point out that under Act 21 of 1875 the University was authorised to grant certain degrees, but by the subsequent Act I of 1889 the only degree the University can now confer is the degree of Doctor of Law. I don't know why the powers of the University were restricted in this respect.

STUDENTS OF THE UNIVERSITY.

Dr. Mookerjee.—I have already expressed my views on this question in another place, and I think that test examinations and the same form of certificate which is demanded from Entrance candidates should also be demanded from F.A. and B.A. candidates. In my opinion the F.A. and B.A. regulations are materially defective in this particular. Mere physical presence in classes is enough to qualify a student for admission to the University examinations. I would go further and add that it is not only desirable to have test examinations compulsory at the end of the 2nd and 4th year classes, but that it is desirable to insist that the college authorities shall periodically test their students as to what progress they are making in the different subjects.

President.—In a school that would be quite easy. But when you come to a college, there is the question is not it interfering too much to dictate to a college that you must have such and such things done?

Dr. Mookerjee.—At first sight it looks like interference with colleges, but unfortunately our colleges, many of them, are nothing better than schools. If it were not made compulsory, the better colleges would suffer. Of course, I don't mean to include the Presidency College, which does not depend upon the number of students on its rolls for maintenance, but other colleges of the better class. As soon as these institute test examinations, students will leave and go to colleges where there are no test examinations. Even with test examinations there might be dishonest colleges that would not hold proper tests, but their number will be nominal.

Dr. Mackichan.—It is distrusting your college authorities and treating them as men who have no judgment as to what is best for the students. Why not accept the statement of a Principal that a student is prepared?

Dr. Mookerjee.—Taking the colleges as they are I would not rely upon certificates alone.

Dr. Mackichan.—If the colleges are as bad as you describe them to be, I should like to ask why they should exist at all.

Dr. Mookerjee.—Of course you can improve them off the face of the earth.

Mr. Justice Banerjee.—Would not another thing be better still, namely, frequent class exercises?

Dr. Mookerjee.—That is precisely what I say. Not only should students have test examinations, but also periodical exercises throughout the two years of their study. It is very difficult to define what these periodical tests ought to be. I would not have this for the M.A.

I am afraid we are apt to treat our students quite in the same fashion as students in England are treated by college authorities. We are apt to forget that our students learn everything through the medium of a foreign language. Therefore it is necessary to test them at different periods of the year to ascertain what progress they are making.

Mr. Justice Banerjee.—Not only that, you must practise them in the foreign language. Unless this practice is regular, they cannot learn it perfectly. An English college student reading at the University, who has attended a lecture of his professor in Physics and Chemistry, will have no difficulty in expressing his ideas in English, if he has understood the subject. Many native students who have understood a lecture in Physics and Chemistry, when you set them an examination paper, are not able to put their thoughts into English.

Dr. Mookerjee.—I know of students who, if you take them into a laboratory, will know all about a machine and can take it to pieces, but ask them to describe it on paper, and they cannot do it, as their knowledge of English is so deficient. If examinations in Physics and Chemistry were practical, that would remove a very great deal of this difficulty.

Mr. Justice Banerjee.—Perhaps the large number of students make it impossible for a man to give further instructions on his subject after lecturing upon it. Somebody should test whether the students really are profiting by the lectures or not.

President.—That falls under the head of tutorial supervision.

Mr. Justice Banerjee.—Practically.

President.—I think a great many of these difficulties might be grouped together. It would be a good thing to define what is meant by a "course of studies." At present it simply means attendance at lectures, whether the students profit by them or otherwise. It might be defined as consisting of an adequate number of lectures combined through a certain space of time with proper tutorial supervision, and in the case of scientific studies with a certain amount of practical work. If a course of studies is thus defined, the course proffered by a particular college might be refused if there is no tutorial supervision or practical work.

Mr. Justice Banerjee.—The tutorial system would be a new thing here.

President.—One of the witnesses, Mr. Wheeler, said it was done to a small extent in the Bangabasi College.

Mr. Justice Banerjee.—That is because Mr. Wheeler takes an interest in his work and does it himself.

President.—Looking at it in the Oxford way the tutor is the real person who is responsible for the student.

Dr. Bourne.—Students in this country have no self-reliance whatever. They want to be taught everything.

Mr. Justice Banerjee.—Professors should cause students to progress, not by carrying them on their shoulders, but by teaching them to walk.

Dr. Bourne.—We actually hear of students who stop professors because they go outside the course a little.

Dr. Mookerjee.—Our boys are blamed for depending too much on their teachers. I think that arises from their going on from point to point, without having understood the previous point.

Dr. Bourne.—A student expects his teacher to reduce his lecture to something which he can understand without any trouble.

Mr. Pedler.—The main fault is that students will not take trouble themselves to understand lectures.

Mr. Justice Banerjee.—Is not that because they are burdened with work too much for them to do?

Mr. Pedler.—The original evil lies far back in our schools.

Mr. Justice Banerjee.—I also think the evil lies there.

AGE LIMIT.

Dr. Mookerjee.—I would be in favour of 15 as an age limit.

Mr. Pedler.—On the 1st of January in every year?

Mr. Mookerjee.—Yes.

The Commission rose then for the day.

29th March 1902.

ENGLISH.

Dr. Mookerjee.—Under the head of University teaching, English is the first subject that comes under my consideration. There is unanimous opinion that students coming to the University have a very defective knowledge of English, and the remedy suggested to remove this defect is the abolition of text-books in English for the Entrance examination. I differ from this view. I trace the defect to the circumstance that boys at the age of 6 or 7 are taught English in the lower classes of our schools by teachers who have no idea as to how foreign languages ought to be taught and who have themselves a very defective knowledge of English.

SALARIES.

The teachers' salary in Government schools in the lower classes is R20. Mr. Pedler says, if it is increased by R5 all round, it will cost Government six lakhs of rupees. Under the existing circumstances, therefore, it is impossible to do that. Private schools pay their teachers in the lower classes from R15 to R20. Most of these teachers have failed in the F. A. examination and some in the Entrance. Their knowledge of English being very inadequate, their students begin the study of the language with bad pronunciation, bad grammar, bad spelling, and bad idiom. The mischief begun at this early stage can never be remedied later on, however hard you may try to do so.

President.—If teachers on R20 are incompetent to teach English, should they not be confined to teaching simple subjects in the vernacular?

Dr. Mookerjee.—In the new scheme, boys will study English up to the 5th class only as a second language. That will be an improvement, but, even so, English will be badly taught. The vital defect of the new scheme is that it insists upon a knowledge of a number of subjects which young boys can neither understand nor be adequately taught.

TEACHERS OF ENGLISH.

Babu Mahendranath Rai suggested that in colleges and schools only European gentlemen should be employed to teach English. I do not think that is practicable. I am afraid school fees will have to be raised. Gradually we should get a better class of teachers. We should institute a degree of teaching so that gradually we may employ in our schools only those persons who have obtained a license in teaching. That license ought not to entitle the teacher to teach any subject he chooses. For it is only in rare cases that a man is able to teach efficiently several subjects.

Mr. Justice Banerjee.—What is your reason for saying that Babu Mahendranath Rai's scheme of employing only European gentlemen to teach English is impracticable?

Dr. Mookerjee.—My reason is two-fold: first, there is the pecuniary difficulty; secondly, if you employ European teachers, they would take many years to find out what are the pitfalls into which the native boys fall.

Mr. Justice Banerjee.—The first condition is that the Englishmen must have knowledge of the students' vernacular?

Dr. Mookerjee.—Yes, especially at the early stage of students' career. Even if you get the best European teacher, he will not be able to teach well boys 5, 6, or 7 years old. I think that graduates who have got a competent knowledge of English should be employed to teach the lower classes.

LARGENESS OF CLASSES.

There is another reason why our young boys are not taught well. In the case of a class of 60 or 70 boys, the teacher cannot attend individually to all of them, and the consequence is that even in the lower classes the system of lectures

which obtains in colleges has been introduced gradually into the schools. Mr. Justice Banerjee will bear me out when I say that generally teachers in even lower classes judge their boys by the University 33 per cent standard.

Mr. Justice Banerjee.—Once a teacher of a small school under our management said that his class had done well in the examination. He congratulated himself on the fact that his boys had secured at least 75 per cent. marks in the alphabet. Such teachers have spoilt the good liquid that we had before, and merely the dregs remain in the glasses.

Dr. Mookerjee.—The two main points as regards the teaching of English are inefficient teaching and largeness of classes.

UNAIDED SCHOOLS.

These ought to be under the control of the University. It has been suggested that schools ought to be left to the Department. I am afraid, if that is done, a great deal of mischief will be the result, for the Department is not working as it ought to work. There are many Inspectors and Deputy Inspectors who ought not to be there. They have, properly speaking, no qualifications. If the Department once begins to interfere with the unaided schools, matters might be worse than they are.

President.—The English experience is that the University is apt to extend its energy in work that is really not University work. It would seem unwise to aim at direct interference of the University with schools, provided the Department works in the right way.

Mr. Justice Banerjee.—The supervision ultimately exercised by Inspectors and Deputy Inspectors is not always very salutary.

Dr. Mookerjee.—These Deputy Inspectors are not men of high education, and many of them are personally interested in the publishing of text-books.

TEXT-BOOKS.

I am sorry to say that the Text-books Committee is conducting its business in an extraordinary way. Books approved by the new Text-books Committee are practically to be forced on all our schools. Some of these books are the worst specimens of books to be introduced among young students. The new Text-books Committee is practically becoming a part of the Education Department with the result that Head Masters in Government institutions, Inspectors, and Deputy Inspectors get their books introduced. In many instances these books are not written by those whose names they bear, but by different persons. In all schools, Government, aided and unaided, that are placed in the hands of the Deputy Inspectors, things are going from bad to worse. I am sorry Mr. Pedler does not know the extent of mischief which has been done. He himself cannot know all these things. We have on our list about 800 schools recognised by the University, and I believe there are a great many more recognised by the Department. It is therefore impossible for the Director to attend to these numerous institutions, and as a consequence they are left under the control of Deputy Inspectors. I am quite sure that their interference would be resented by a very large body of competent schools, whereas, on the other hand, should the University exercise even some small control over these schools, so far from its action being resented by anybody, it will be hailed with pleasure by all as tending to do a great deal of good.

In 1892 (Minutes of December 17th, page 447) the Senate passed a rule requiring an assurance that no teacher would teach a class of more than 50 pupils. That was a compromise, as 40 was at first proposed. Soon afterwards the rule was upset. Now 60 has been suggested. Even that large number is a compromise, and yet agitation is being directed against it. There are schools and schools. There are schools the proprietors of which can afford to break up the classes so as to have not more than 50 scholars in each class. Then there are schools who cannot do that on account of pecuniary difficulties. It is cruel kindness to our boys to place them in such schools, for ultimately they discover that they have got no education at all. There would be no such difficulty if our schools were endowed schools; then there would be no complaint, for the interests of teachers and boys would be the same. Teachers would be able to manage a class of 30 or 40 more readily than one of 90 boys.

TEXT-BOOKS.

I think it would be a mistake to give up text-books for the Entrance, although it must be admitted that the present text-books are not what they ought to be. There are no two opinions that English cannot be learnt without text-books. That is admitted on all hands. The only question is whether the University ought to prescribe text-books. In 1874 the text-book system was abolished on the ground that it led to cramming, but was re-introduced in 1880. In cramming students learnt by heart long paraphrases. During the five years when the system of text-books was suspended, it was found that cramming in a different shape was brought into practice. They resorted to books of Model Questions and Answers. Teachers began to publish collections of all possible questions, which might be set at the Entrance, together with answers.

Mr. Justice Banerjee.—Models from questions set in previous years?

Dr. Mookerjee.—Yes. Students most assiduously got them by heart. Another evil was that the examination in grammar developed into an examination in English Philology. That could not be of any use to students at the Entrance stage of their career. Hence in 1880 the Syndicate decided to revert to the old system of prescribing text-books. The book that was prescribed in the first year was Lamb's Tales and in the second year the "Book of Golden Deeds."

MARKS.

The only way to improve the existing system of examination is to stop assigning so many marks to the questions from text-books. At present 120 marks are assigned to questions from text-books and 80 marks to translation and composition. I would like to reverse the order, 120 marks being given to translation and composition and 80 marks to the text-books.

SELECTION OF PIECES.

Pieces now selected are not suitable for our boys. I will not say that the selection is made without any regard to style; but very often it is made with reference to other things than style. The pieces are generally didactic, being intended to impart moral teaching to our boys; they thus become dry—sometimes very dry. Many of these pieces deal with Hygiene. It may be an important subject, but I don't think it is suitable for an English course for school-boys.

Some pieces are inserted in the readers to give a copy-right in the book. They are not the very best pieces and are such as no good publisher would consent to embody in a book. They are second-rate pieces. The pieces should be written in a clear and simple style, and should be such as would suit native boys.

Mr. Justice Banerjee.—We have got a rule to that effect.

Dr. Mookerjee.—Yes; it is systematically ignored. (Reads Rule at page 27.) You might have interesting books like Johnson's *Rasselas* or the abridged edition of *Robinson Crusoe*—about 100 pages. There should be a continuous narrative which our Entrance boys can learn within the time allotted.

CRAM.

It is assumed that Indian boys have particular aptitude for cramming. I do not think that is true. They do cram; but they are compelled to do so, as they are asked to do things which are above their level. They cannot follow their teachers, for they are not properly taught, and, as a consequence, they must cram.

Mr. Justice Banerjee.—I suppose obscure allusions in the text-books should not be prescribed, and questions relating to such allusions should not be set in the papers. Questions should be such as to enable candidates to put simple ideas in correct English. That is quite enough at the Entrance stage.

Dr. Mookerjee.—Yes. If a book like Southey's *Life of Nelson* were appointed, and it was once prescribed for the Entrance, none of the students could follow the style or take any interest in the subject-matter.

President.—Would not selections from a book like *Tod's Rajasthan* be a proper book?

Dr. Mookerjee.—Yes. There are other interesting books like the travels of Fanny Parke, which is written in beautiful English, and is very intelligible. Sir William Hunter's Rural Bengal is a good book. A selection can be easily made of interesting books. Duff's History of the Mahrattas or even passages from a book like Marshman's History of India would do very well.

Mr. Justice Banerjee.—Students ought to be initiated in foreign things. (To the President.) I do not know if you have seen "Reader No. 5," which was at one time selected by Mr. Bothune, your predecessor. It describes life and scenery which can be appreciated by Indian students.

Dr. Mookerjee.—I think the charge of cramming against Indian students is unfair. They cram because they cannot understand.

Mr. Justice Banerjee.—Poems like the Deserted Village are good books.

Dr. Mookerjee.—In fact, they cannot cram anything like that.

President.—Provided examination papers are properly set.

Dr. Mookerjee.—I know of students who can reproduce Hunter's paraphrase of Milton's Paradise Lost, but they cannot quote 10 lines of Milton. I think the character of the Entrance text-books in English ought to be radically changed.

Mr. Justice Banerjee.—What do you think of Mr. Stephen's proposal of a combination of text-books which students should read thoroughly and unseen passages.

Dr. Mookerjee.—I think, in addition to text-books, unseen passages ought to be prescribed either to be explained or translated, with a proviso that the passages shall not exceed in difficulty the passages in the prescribed text-books.

TRANSLATION.

The method which was introduced in 1886 of asking students to translate passages from vernacular into English is excellent. The present method is to translate an English passage into the different vernaculars and place the translation before the students asking them to re-translate it into English.

Mr. Justice Banerjee.—So that they get back to the starting point.

Dr. Mookerjee.—That policy, I am afraid, is a failure. I think it would be much better to set genuine vernacular passages. Of course, there is a theoretical risk of these passages being easier in the case of certain candidates. Hindi students might find their passage easier than Bengali students; but I do not think that would involve the students in very great hardship; for it can be avoided by selecting pieces by examiners in consultation. It would be impossible to get a man who knows all the vernaculars; but we can easily get men who know Bengali and Urdu, or Bengali and Hindi, or Hindi and Urdu. That might possibly be arranged. I would strongly oppose the suggestion which has been made by some that the system should be discontinued.

Mr. Justice Banerjee.—In Bombay we had a suggestion that the system should be supplemented by passages in English to be explained. It was pointed out that that would be a better test of the candidates' knowledge of English. In translating a passage from his own vernacular into English, a candidate has, theoretically speaking, no difficulty in understanding its meaning; he has much greater difficulty in explaining an original English passage.

Dr. Mookerjee.—We might have a mixture of the two. I think it would be a great pity to give up the translation system. It is really asking the student to do what he will have to do all his life. Take the case of any of us. Although we have to express our ideas in English, fortunately or unfortunately, the ideas come in our mother tongue first, then they have to be translated. Out of 24 hours every day we spend the greater part in speaking Bengali and in thinking in Bengali.

F. A. ENGLISH PROSE.

This is considered a long course comprising mainly four books. So far as prose is concerned, I would give a book written in simple prose not abounding in allusions or dealing with the criticism of authors which the students have not read. For instance, take the book which is a favourite with the Calcutta University: Hutton's Life of Scott in the "English Men of Letters" Series. I myself have studied it, and I know what a terrible thing it is for us. It gives

detailed criticism of almost every one of Scott's novels. As questions are frequently asked from this text-book dealing with the criticism, what can students do but cram, seeing that they have not read the books?

Mr. Justice Banerjee.—Sometimes candidates are asked to compare one of Scott's characters with another.

F. A. ENGLISH POETRY.

Dr. Mookerjee.—The poetical works prescribed are generally unsuitable. Take, for instance, Tennyson's "Aylmers' Field" In matter, manner and style the book is unsuitable for the F. A. course.

Mr. Justice Banerjee.—Tennyson's "In Memoriam" would be even more unsuitable?

Dr. Mookerjee.—Precisely so. Perhaps Milton's Paradise Lost is not appreciated by our students, but I should be sorry to see it cut out. If the Entrance standard were raised it might perhaps be read. It is at present too classical for the understanding of students.

President.—It would seem that often questions are put not to ascertain whether the students are able to put their ideas in decent English, but whether they have gathered a certain amount of incidental information which is often not understood (Reads example from the Calcutta Calendar).

Dr. Mookerjee.—The B. A. examination tests whether the candidates have gathered a certain amount of information, not whether they know English. The character of the text-books might be improved. I think the Men of Letters' series books might be usefully cut out from the Pass course. They will disappear from 1903, mainly owing to the criticism of Mr. Justice Banerjee. In Bombay for the B. A. they prescribe a more limited quantity than we do, but they require a very full knowledge. They have generally for the English course a play of Shakespeare and something of Bacon—either the "Advancement of Learning" or Essays.

Mr. Justice Banerjee.—They have another branch of the same subject, language and literature in which a further course of reading is prescribed.

Dr. Mookerjee.—So far as the Bombay University is concerned they have a certain portion of their course to be very carefully read, and they demand also a general knowledge from their students.

FAILED B. A.'S.

There is great difficulty as regards our failed students in the B. A. examination. I don't know how to deal with that question. Perhaps the Commission may be able to solve it. During the last ten years 25 per cent. of students have passed; the difficulty as regards the 75 per cent. of failed candidates is insuperable. If they rejoin the college, they have to read in six months what ordinary students would do in two years.

Mr. Justice Banerjee.—They have half of the course of the preceding year?

Dr. Mookerjee.—No; as was pointed out by one of the witnesses, half the old course is not in fact retained. The student may have to read a new play of Shakespeare and a new piece from Milton in six months. If the ordinary student requires two years, how can the student who has shown himself to be deficient in English do it in six months.

President.—At Oxford the difficulty does not arise. In the Honours course, where it might come in, the number of failures is exceedingly small because the examiners may allow a simple pass where the student is not good enough for honours.

Dr. Mookerjee.—It is a constantly recurring difficulty. I don't know what to do in the matter.

Mr. Justice Banerjee.—The difficulty may be taken note of by the Board of Studies when prescribing new text-books. They should always carry on at least half, and probably more than half, of the books of the preceding year. It is said that questions in the text-book get exhausted. That objection does not appeal to me. If a student is able to answer any question that may be set out of a given text-book, what does it matter whether the questions are repeated.

Dr. Mookerjee.—What is suggested is that the student may cram up and answer every possible question which can be set out of the book.

Mr. Justice Banerjee.—If he can answer every possible question that may be set, he is entitled to pass.

Dr. Mookerjee.—In practice the possible questions are not easily exhausted. Take for example, Shakespeare's play of "Hamlet" or "As You Like It." You cannot say you have exhausted every possible question which can be set from those books.

I would suggest that there should be unseen passages introduced in the F. A. as well as in the B. A. examinations.

ENGLISH IN THE M. A.

According to our regulations candidates whose mother tongue is English are not allowed to take the M. A. degree in English. It has been suggested that that rule should be abrogated and that it should be open to candidates, whether their mother tongue is English or not, to take English for the M. A. degree. That suggestion involves a departure from the practice that has obtained since 1858. The principle underlying the rule is that the degree in languages should not be obtained by any one who has not a knowledge of a classical language; and the list which was originally framed included only Greek, Latin, Sanskrit, Arabic, Hebrew and Pali. Even Persian was not included in the list. In 1864 upon a representation made by Sir William Muir this regulation was changed. A proposition was brought before the Senate and after a great deal of discussion it was settled as a compromise that no one should be allowed to take his M. A. degree in Persian unless he had a knowledge of Arabic up to the F. A. standard. That point was referred to by one of the witnesses here. If English is allowed to be taken by people whose mother tongue is English, I am afraid there will be a distinct lowering of the standard. I don't think the rule has caused any hardship. Candidates whose mother tongue is English can take their M. A. degree in History or Philosophy or in any other subject.

GREEK AND LATIN.

The next subject is Greek and Latin. I do not profess to know any thing of these subjects. There is a general complaint that they are not properly taught and that in the present examinations questions are set in such a way that candidates are able to pass without knowing any thing about the languages.

Mr. Justice Banerjee.—You are in favour of retaining them as classical languages?

Dr. Mookerjee.—Yes, certainly. I have always regretted that so much time is spent in learning English that we have no opportunity to study either Greek or Latin. I have sometimes suggested to our Oxford scholars that in the English course there ought to be translations from Greek and Latin authors—translations which rank as master-pieces of English. For instance Browning's translation of Aristophanes. They tell me that such translations will convey no idea of the original. Portions of Jowett's translation of Plato might be easily included in the B. A. course. I have no doubt that students will find it far more interesting than a book taken from the English men of Letters Series. I am not referring to ordinary translations and cribs but to first rate translations. I don't know what your opinion is on this subject. I think it is a pity that our graduates know only English literature and practically nothing of Greek and Latin literature.

Mr. Justice Banerjee.—I think that many people read a little of them.

Mr. Mookerjee.—Some few do. For B. A. honors our students have to read archaic poetry. Why not also read Chapman's translation of Homer; it is certainly good English. Every student reads Shelley's poems but I am afraid that few of our graduates have read his translations of any of the great Greek authors. In 1890 when I was a member of the English Board I suggested that Browning's translations should be appointed for the M. A. Mr. R—— said "you can not teach it; it has not been annotated and I am not going to teach it." There was an end of the matter. My own idea is that no graduate can be styled cultured who has not read some of the Greek and Latin authors.

CLASSICAL LANGUAGES OF THE EAST.

I regret that classical languages of the East are not learnt properly ; I think the charge is true that our students do not learn classical languages properly. In my opinion every student who takes a degree in this University ought to be made to learn at least one classical language at some point of his career. So far as the Entrance examination is concerned a candidate is at liberty to take a classical or a vernacular language. So far as the B. A. is concerned he need not take up any second language at all, but if he takes a second language, he is required to take up a classical language. In the F. A. you have classical languages compulsory ; I think they ought to be retained. I think it would be disastrous to the best interests of the country that our students should not know their own classical language.

President.—Have some vernaculars really the same educational value as a classical language—such as Tamil in Madras, Marathi in Bombay and Bengali in Calcutta ?

Dr. Mookerjee.—As regards Tamil and Marathi, I do not know ; but for Bengali my answer would be emphatically negative.

Mr. Justice Banerjee.—There are now two schools of Bengali literature—both current—each supported by very eminent names. One a Bengali language which has very little to do with Sanskrit and the other no doubt borrowed largely from Sanskrit.

Dr. Mookerjee.—Apart from that, even assuming that the Bengali language is very rich, I don't think that there are books in that language which will give the same amount of mental culture as the works of Kalidasa, Raghuvansha or Sakuntala—books which have survived for 2,000 years must have something in them. When our Bengali books survive for 2,000 years, then it will be time to consider whether they can take the place of classical books or not.

Mr. Justice Banerjee.—Classical languages can be the means of enabling graduates to judge for themselves directly the importance of historical events of the past.

Dr. Mookerjee.—Certainly.

Mr. Justice Banerjee.—Not merely political events, but events affecting the progress of the human mind.

Dr. Mookerjee.—Yes ; that is a very important point ; its consideration ought to weigh with us.

President.—Without a classical language one may read a history of the past, but not the documents which are themselves a portion of the past. You have not got ancient books in Bengali ?

Dr. Mookerjee.—No. If you give up Sanskrit, the whole of our tangible history will go. Sanskrit will have to be retained.

STUDY OF SANSKRIT.

Another question which arises is whether the study of Sanskrit is properly carried on. I am sorry to say that its study is extremely defective. The reason is mainly that our students do not learn any Sanskrit grammar. It is impossible to have any knowledge of Sanskrit without the knowledge of its grammar.

President.—It was stated by one of the witnesses that there is no grammar suitable for students.

Dr. Mookerjee.—I think that is true. The Board of Studies in Sanskrit is endeavouring to find out a book which will be suitable for Entrance students and another which will be suitable for more advanced students, but they have not yet been able to find any. It was suggested by the present Principal of the Sanskrit College that the book written by that eminent Sanskritist, the late Pandit Vidyasagar, should be appointed, but I am afraid it would not do for all our students, for it is written in Bengali.

Mr. Justice Banerjee.—Except Part IV.

Dr. Mookerjee.—Yes, that is written in Sanskrit. So far as I have been able to judge, I think that it would be a desirable thing for the University or some body appointed by the University to write a book suitable for our students. It would, however, be difficult to write such a book and

satisfy the demands of different persons. For there are some who want aphorisms in it, some want it to be written in English, and some want it to be written in English and Sanskrit together. The problem will have to be solved, and the only body which can solve it is the University.

Mr. Justice Banerjee.—Well-known and easily intelligible aphorisms should be incorporated.

Dr. Mookerjee.—I don't think you can have a Sanskrit grammar with aphorisms for beginners. Such a book would be suitable if our students had to learn nothing but Sanskrit, as in the olden times.

SANSKRIT GRAMMAR.

Now students have no time to study Sanskrit grammar in this manner. I think it is essential, without discussing any question of principle, that our students should be made to learn Sanskrit grammar. One mischief has resulted from our omitting to do so in the past. Students do not get a sufficient knowledge of Sanskrit grammar, and therefore are obliged to cram up the books which are prescribed. Take, for instance, the Sanskrit book which is prescribed for the Entrance. It is a selection made by the University containing classical pieces. A student would understand them if he knew Sanskrit grammar, but not knowing it he is obliged to learn by heart the paraphrase, explanations, etc.

Mr. Justice Banerjee.—Giving no small labour to himself?

Dr. Mookerjee.—He is compelled to do so. This year University has prescribed a Sanskrit book for the Entrance containing 500 slokas covering 50 pages. Intelligent students ought to be able to master it very easily in two years; but as a matter of fact, with the keys they have to learn 500 pages.

KEYS.

These keys are a specimen of how far misapplied ingenuity can go. They contain every possible kind of question, which can be asked by the examiner, and its answer.

Mr. Justice Banerjee.—One year the examiners set a question which, at that time, was of a new kind,—to explain a given Sanskrit passage in simple Sanskrit words.

Dr. Mookerjee.—Yes, it was at my suggestion that the question was put. Students were asked to reproduce the passage in simple words. Not more than one per cent. of the students attempted the question. Next year a similar question was put and every candidate attempted it, for the key-makers taking note of the new question had in their keys paraphrased the whole book. The very object of the question was defeated. I do not know if there is any method possible by which these key-makers can be stopped. I hope in all seriousness that this most pressing evil may be stopped as soon as possible. Even if some legislation is necessary, I think it should be introduced. I am not myself prepared with any cut and dry scheme, but I suggest this question for consideration.

President.—The first difficulty in the way of making any such regulation would be the definition.

Dr. Mookerjee.—If one went to the other extreme and stopped all kinds of notes and keys, it would be a good thing; the mischief has grown to such an extent that we should stop all kinds of annotations.

President.—It seems to me to be an extremely difficult question.

Mr. Justice Banerjee.—What do you think would be the probable effect if the University were to insert a rule that examiners should give no credit for any answers which are taken from keys. Would that have a wholesome effect on the examinees? The difficulty would, no doubt, be that examiners might indiscriminately refrain from giving credit for answers which are honestly given, thinking that they come from keys.

Dr. Mookerjee.—We attempted to remedy the evil some years ago, by the Syndicate laying it down that no person would be appointed an examiner who had written a key. That rule had no effect, because the keys sell well and persons make more money by writing keys than by acting as examiners. If candidates are asked to translate a vernacular or classical passage from the text-book into English, they do it by the help of keys, because the whole of

the text is translated into English, sometimes very bad English, and students learn the whole thing by heart. It would be impracticable to altogether abolish the text-books, because the standards would vary so greatly that the candidates would not know what to do. Some very respectable people have written such keys. They do not see that they are putting poison into the hands of students.

Mr. Justice Banerjee.—Do you think that a rule like the one I suggest might be tried?

Dr. Mookerjee.—Yes, but astute students and teachers would discover that it is not possible for the examiner to have in his hands every key that has been published. In 1890 Mr. Tawney was appointed to set a paper in English. He asked me to get from the market every key that had been published for the Entrance course. He read them through, and framed questions which could not be answered from the keys. Next year the keys were changed in such a way as to answer all these questions. The evil is not so great in the higher examinations as in the Entrance, and if legislation were resorted to, at least to this extent, that no *key* or no *notes* should be published to any text-book prescribed for the Entrance Examination, that would be sufficient for our purpose. It would be too late for students to begin the use of keys at the stage of the F. A. course. If they have relied upon themselves in the lower stages, they will be accustomed to do without keys; and once they know how to get on without the keys, they will not have resort to cramming. It has been suggested that our examinations are not properly conducted, because questions are set which encourage cramming. As long as there are keys in the market, it is impossible for examiners to set questions which cannot be answered by cramming. What could the examiner do unless he were to set a paper consisting entirely of unseen passages. I do not know if the evil has increased to the same extent in England.

Mr. Justice Banerjee.—The mischief is not so much seen there, because students do not make practical use of either Latin or Greek.

Dr. Mookerjee.—I am sure that whatever regulations we may introduce will be practically useless unless these pernicious books are stopped. Give up your Entrance text-books if you must, but at all hazards stop these keys and this cramming.

INDIGENOUS SANSKRIT EXAMINATION.

The question arises whether the purely indigenous Sanskrit examinations which are now conducted under the direction of the Government should not in some way or another be assimilated to the University. There are three kinds of such examinations, *viz.*, lower, middle, and higher.

President.—Last year there were 4,000 candidates for the three examinations; it would be a big affair.

Dr. Mookerjee.—I think it would be possible for the University to take up these examinations, if they are kept quite distinct from the Entrance Examination. The two must not be mixed up. It would give greater impetus to Sanskrit study if it were placed under the control of the University.

TOLS.

President.—It has been suggested that *tols* do not wish to be brought under University control.

Dr. Mookerjee.—I do not think that is the case. The only feeling against the change would be on the part of the Principal of the Sanskrit College. There are complaints as to the manner in which these examinations are conducted: complaints as regards fair play and so on, and that partiality is shewn to certain pandits.

President.—If the University takes over the examination, the question will arise whether the Madras suggestion should be adopted and an Oriental side added to the University in which titles or degrees would be granted to students without their knowing English.

Mr. Justice Banerjee.—At the present day no man would be fit to be styled a graduate of any University without having a knowledge of English, which is the only medium for making oneself acquainted with Western thought.

President.—You could not call a purely vernacular student a first-rate Sanskrit scholar.

Dr. Mookerjee.—I would suggest that, even if these examinations cannot be taken out of the hands of the Principal of the Sanskrit College, the University should have an Oriental side with the addition of a knowledge of English.

A consequence would be that many people who now go up for the purely Sanskrit examination would come to the University.

Mr. Justice Banerjee.—There is another point of view to the scheme. It is very often said that there are minds which are unfit to go through a sustained course of study of Philosophy or Mathematics. These flighty imaginative minds will be satisfied if they are allowed to become graduates of the University by receiving a degree after passing an examination in English and a classical language only.

Dr. Mookerjee.—I would suggest an Oriental side, candidates being examined in English and a classical language for the Entrance and F. A. examinations, as also for the B. A. and M. A. degrees.

Mr. Justice Banerjee.—You can do away with so many examinations and retain only the Entrance and Degree examinations.

Dr. Mookerjee.—When we started with examinations in 1857, we had the Entrance and B. A. examinations only. It was subsequently found out that it was a mistake that students should be tested only once in the course of four years.

Mr. Justice Banerjee.—One of the reasons for this was that there were so many subjects for examination.

Dr. Mookerjee.—However, apart from such matters of detail, I should certainly like the University to have an Oriental side. It would also cover the suggestion of Dr. Ross for Arabic, and I think it would be appreciated by the Mahomedan community. They say that English without Arabic has spoilt their students. They would like to have their sons educated in English and Arabic. I don't think that the men whom we shall turn out under the new system will be any worse than the men whom we are now turning out—knowing a little of English, Physics, and Chemistry, and nothing thoroughly.

VERNACULARS.

Dr. Mookerjee.—So far as my University is concerned, I do not think we can do more for the Vernaculars than we have already done. I would certainly object to making them an alternative subject with the classical language. I oppose that on principle.

MATHEMATICS.

Dr. Mookerjee.—I am satisfied with the existing standard. The M. A. is as stiff as a first class at Oxford or Cambridge.

Mr. Justice Banerjee.—It includes almost all the subjects in part I of the Cambridge Tripos.

Dr. Mookerjee.—My own idea of the Cambridge examination is that it is by no means an ideal examination. It is capable of improvement in many respects.

President.—Professor Paranjpye, the Senior Wrangler, tells us that a Bombay B. A. in Mathematics knows about as much as a good man when he enters the Cambridge University.

Dr. Mookerjee.—Perhaps the Bombay standard is lower than ours. It must also be remembered that our students have to learn everything through English. The standard for the B. A. in honours is also pretty stiff. There is no adequate provision for the higher teaching of Mathematics.

PHYSICS AND CHEMISTRY.

Dr. Mookerjee.—As regards the subjects of Physics and Chemistry, I am afraid we have made a mistake which arose in this way. Under the old affiliation rules which were abrogated in 1892, colleges could not be affiliated partially in certain subjects. They were affiliated only for the F. A. or B. A. examinations. The consequence is that we have affiliated colleges in Physics and Chemistry which did not make any adequate provision for the practical teaching of these

subjects; and in many colleges in Calcutta these subjects are taught in the same style as History or Philosophy. There is no practical teaching, no practical demonstrations. The students simply learn book-work. In order to improve matters, I would suggest that, so far as colleges in Calcutta are concerned, they should be called upon to provide proper instruction, or their affiliation should be taken away so far as Physics and Chemistry are concerned, and their students should be made to learn these subjects in the Indian Association for the Cultivation of Science, where they can easily get proper teaching if they care to have it. I think time has come when some action should be taken in this matter. It will be remembered that when these subjects were introduced into the F. A. Examination in 1883, it was expected that the then existing colleges would gradually come up to the mark, but unfortunately some of them have not done so.

Mr. Justice Banerjee.—Your suggestion would not be quite practicable. It would lead to grumbling, as the Science Association would not be able to accommodate all the F. A. candidates.

Dr. Mookerjee.—Not all; I presume that these colleges, if called upon, will make adequate provision. Take, for instance, the General Assembly's Institution. If they are called upon to provide a laboratory so far as F. A. examination is concerned, they have got plenty of funds to do it. If a little pressure is put on them, they will do it. The Ripon College has improved of late, and with further pressure Babu Surendranath Banerjee will make the necessary arrangements for a laboratory. The Albert College cannot do it, because they have not got funds. In the Bangabasi College there is very little provision for practical teaching in Physics and Chemistry. It might come up to the mark or it might not. I am not assuming that these colleges will not try to come to make adequate provision. I think that time has come for the University to take some action in the matter. In 1885 the Syndicate had, in introducing a new scheme, to be very indulgent, and it was expected that the colleges would gradually come up to the mark. Some of them have come up to the standard, but some have not, because the matter has not been properly attended to.

President.—The proposal accord with my suggestion for courses of study. A college claims to have a course in Physics and Chemistry. The University asks to be shown the appliances. If they are unsuitable, the University replies that the college has not the course, and cannot be affiliated in the subject.

Dr. Mookerjee.—The Indian Science Association was affiliated to the University at my suggestion. I expected at the time that students would come forward. They have not done so, because they can pass the examinations in the book-work and the colleges are unwilling to let them go. I think that the time has come when you must look the thing in the face. You must take a bold step, although it may be unpleasant.

While on this subject, I would like to suggest that for the B. A. examination colleges should be affiliated in departments, so that proper provision can be made for teaching. Under the present system, at the time when an application is made for affiliation, there may be a competent staff provided to teach the A course, and, after the affiliation is granted, Science classes may be opened without any laboratory or proper staff. I think the University must now take some action in the matter. We have enough of expansion. We must now look to quality.

MENTAL AND MORAL SCIENCE.

Dr. Mookerjee.—I think the proper course is to have both a syllabus and text-books. I am clearly of opinion that you cannot do without a syllabus, otherwise the extent of the subject will be absolutely undefined. The scope of the course will depend upon the constitution of the Board of Studies for the year. There must be a syllabus defining the extent of the subject. Then we must have text-books prescribed, otherwise students and professors living many miles away from each other will not have any idea of what is required of them. With the class of teachers which Indian colleges can afford, the subjects cannot be taught without text-books.

HISTORY AND GEOGRAPHY.

Dr. Mookerjee.—My own opinion is that the study of History has been systematically ignored in this University in recent years. I think for the

Entrance Examination the History course is far too heavy. It consists of the History of England, the History of India, and Sir W. Lee-Warner's "Citizen of India," a Manual of General Geography, Physical Geography, Science Primer. If Sir W. Lee-Warner's book is to be studied, it should be made a separate subject. It adds to the course. I am in favour of a book telling students about the Empire, but I object to its being added to the overburdened History course. When it was introduced, an altogether insufficient reduction was made in the rest of the course. The style of the book is such that it is very difficult for Entrance students. At one time only the History of India and an easy and short book on Ancient History were prescribed. Students cannot understand English politics at the Entrance stage of their career. It would be better to defer English History to the F. A. course and to transfer the short Manuals of Greek and Roman History from the F. A. to the Entrance course.

I think that the course of Geography ought to be very much simplified. So far as Entrance students are concerned, only a very elementary knowledge of general geography should be required, and special stress should be laid upon Indian Geography. At present our students do not know much about even Bengal or Orissa.

President.—I have seen the German way of teaching Geography. They start from home, then study the surrounding districts, then follow the chief lines of communication, and so on. They thus gradually become accustomed to the whole map of the world. But that implies a high class of teachers.

Dr. Mookerjee.—Not teachers on Rs. 15 or Rs. 16?

Mr. Justice Banerjee.—I have seen the same system followed in a Parsi girls' school.

Dr. Mookerjee.—Students and teachers do not understand Professor Huxley's "Introductory Science Primer." It is much the most difficult of the series, and is too hard for the Entrance Examination. If Physical Geography is retained, it should be studied from a book which deals with the Physical Geography of India. How can a Bengali boy living in the Gangetic Delta understand illustrations taken from the mountains of Wales. A book might be specially written by some one in the Geological Department.

POLITICAL ECONOMY.

Dr. Mookerjee.—This should not be retained as part of History. Political Economy and Political Philosophy are of sufficient importance to form separate subjects. If a man does not choose to learn History, he ought nevertheless to be given an opportunity of learning Political Economy and Political Philosophy.

President.—In Oxford it has been thought desirable to combine History and Political Economy, because the former does not, it is considered, draw out the qualities of the mind. In Political Economy there is an element of logic and reasoning.

INDIAN HISTORY IN THE M. A. COURSE.

Dr. Mookerjee.—One of the subjects which students read for their M. A. degree is a period of History, and, ever since the examination has been instituted, a period of European History has been selected. The consequence is that a man may take his degree in History without knowing anything about the History of India, except what he learnt for the Entrance Examination. I do not think that is creditable to our University (Reference Calendar, page 217). A period like the reign of Akbar for which sufficient materials exist might be prescribed.

SCHOOL OF THEOLOGY.

That seems to me an impossible suggestion. There are so many difficulties in the way. I don't think we can make a beginning now. There is a preponderance of opinion against it.

Mr. Justice Banerjee.—There is no objection to its present place in the Moral and Mental Science course.

President.—I don't think the Commission is called upon to go into the question of the Danish Charter which has been raised in this connection.

CONDUCT OF EXAMINATIONS

RE-EXAMINATION.

Dr. Mookerjee.—When a candidate in the Entrance, F. A. or B. A. examinations has failed in one subject only, his papers are sent to the original examiners to be re-examined upon the original standard; the only object of this procedure is to guard against any possible inaccuracies. The system was introduced in February 1890, on the suggestion of Mr. Justice Banerjee. Sir Alfred Croft and Mr. Tawney opposed it on the ground that it was unknown in any British University, and that there would be no finality. Then the compromise was settled that the system should be tried at any rate for one year. The next examination was held in March 1890, and in June following the question was again discussed by the Syndicate. I myself had acted as one of the Tabulators for 1890, and I pointed out from the results of the tabulation that the system of re-examination was no longer a question of principle, but of facts. Our re-examinations showed that mistakes were made by our examiners, and therefore that re-examinations were a necessary evil. The mistakes are not errors of judgment; they are mechanical errors in arithmetic. Examiners frequently make mistakes in the addition of 800 or 900 sums. They have to do the whole work in a hurry within 4 or 5 weeks. Even the most careful men may make mistakes under these circumstances. Mistakes are also made in transferring marks from the inside paper to the outer cover, *e.g.*, 27 on the inner paper is made 72 on the cover; or 47 becomes 87. Sometimes wrong marks are transferred from the cover to the rolls which are sent to the University. These are not errors of judgment, but mechanical, and therefore can and should be prevented. Finally, the Syndicate sanctioned the rule permanently with some modifications (read rule at page 149). The object of asking the original examiner to again examine the same papers is not therefore to suggest to him that he should pass the candidate by lowering the standard, but to enable him to see if he has made any mechanical mistake and to rectify it. As an instance in point, it may be stated that in 1890 an F. A. candidate had got 82 marks in Mathematics, but they were entered as 2, the first figure 8 being somehow or other left out. I cannot say whether such mistakes are made by examiners all the world over; examiners in England may not make such mistakes; their conditions are, however, different from those of our examiners.

Mr. Justice Banerjee.—Here they have to deal with a large number of candidates.

Dr. Mookerjee.—Yes; besides, a large number of our examiners are not first-rate men.

President.—The figures of examiners in England are checked by clerks.

Dr. Mookerjee.—It would be impossible to trust the work to clerks here.

President.—Sometimes re-examinations are held by order of the Syndicate.

Dr. Mookerjee.—That only happens when the Syndicate has reason to suspect negligence on the part of examiners. In the Degree examination there has never been any re-examination, except in one case, which was brought before the Medical Faculty and in which Dr. King protested.

Mr. Justice Banerjee.—Mrs. Ganguli, who was one of the candidates, applied to the Syndicate to have her case re-considered. She said that one of the questions put to her was to examine a patient suffering from phthisis; that disease can be tested only by means of percussion, and percussion can be successfully carried out only by the strong fingers of a man. She could not make the percussion with the necessary degree of strength, and therefore failed. Under these circumstances, she requested the Syndicate to reconsider her case. Some members of the Syndicate took a lenient view, it being the first in which a female candidate was concerned, but the majority of members declined to make it a special case. They forwarded the petition to the examiners for favourable consideration. The latter, however, did not think it necessary to interfere.

Dr. Mookerjee.—So far as my experience goes, extending over thirteen years, the Syndicate has never ordered re-examination in a Degree examination. In 1886 they ordered re-examination for the Entrance, as they had grounds to suspect gross negligence on the part of the examiners.

President.—There was a case of a B. A. candidate in Mathematics?

Dr. Mookerjee.—Yes, last year.

President.—His papers were re-examined because one of the examiners had accidentally failed to give him any marks, and the Syndicate thereupon gave his papers to be re-examined to one of their members.

Dr. Mookerjee.—No, the Syndicate did not do that. It so happened last year that one of the examiners failed to send in any marks of a particular candidate in Mathematics. He applied to the Registrar to be furnished with a copy of his marks, and when it came into his hands, he discovered that he had got no marks in Mathematics. The Principal of his College then wrote to the Registrar stating that he himself had handed in the candidate's Mathematics answers, and requesting that an inquiry might be made in the matter. The Registrar communicated with the Examiner on the subject, and the latter reported that he had received the candidate's papers, but had forgotten to send his marks. The Registrar then inserted those marks in the Mark Roll. This was done two months after the report was submitted by the Board of Examiners. The Registrar also informed the Principal that the marks were accidentally omitted. That officer, however, wrote back to say that he did not want the Registrar's decision; he desired that the matter should be placed before the Syndicate. This the Registrar declined to do. The question ultimately came before the Syndicate, and I gave notice calling upon the Registrar to place all the papers relating to the matter before the Syndicate. One of the questions which was put to him was, "Why did you alter the Mark Roll which had been signed by the examiners who had submitted their report?" If any marks have to be subsequently inserted in the Mark Roll, the matter ought to come before the Board of Examiners, who may declare the candidate concerned to have passed or failed. A great deal of unpleasant discussion then followed. As soon as the answer papers were laid on the table, I looked at them and accidentally found on adding up the marks on one of the papers that they exceeded the maximum number of 100. I asked the Registrar to explain how this occurred. After a great deal of difficulty, I found that the examiner had given five marks for the first question, and that near the second answer he had written the figure 10. This I took to be 10 marks for that answer; but on closer inspection I found that these ten included the 5 marks which were given for the first question. This was contrary to rules. I placed the matter before the Board of Examiners, and asked the particular examiner to explain the circumstance. After looking at the papers, he said that he would pass the candidate, and requested me to mention this to the Board. Some of the other examiners protested against the candidate being passed, arguing that the examiner must have made some mistake, otherwise he would not be prepared to pass the candidate. The whole thing was explained to the Board, and the examiner adhered to his decision to pass the candidate, and, as a matter of fact, the candidate was passed.

Mr. Justice Banerjee.—Passed by the Board?

Dr. Mookerjee.—Yes. The Syndicate could not pass him, as it has no power to do so. The Syndicate has never attempted to interfere with the Board of Examiners as such at Calcutta. Unfortunately it has found it necessary to interfere with individual examiners now and then.

President.—But is the decision of the Board of Examiners final in this sense; cannot the Syndicate, as the executive of the University, enquire into anything affecting the conduct of the examination? If a candidate stole the papers and confessed, the Syndicate could have a right to intervene. The candidate could not claim a degree on the declaration of the examiners.

Dr. Mookerjee.—If there are examiners found to be dishonest, can the Syndicate give the papers to another person for examination?

President.—I think so.

Dr. Mookerjee.—In one case of great dishonesty the contrary was held. There was a difference of one mark between the first and second candidates, and the examiners gave two marks to the second in order to make him first. The Syndicate held that the examiners were within their rights. Sir Charles Paul took the same view.

President.—I should not read section 14 as giving an absolute right, but a right subject to the regulations and control of the University.

SETTING PAPER QUESTIONS.

Dr. Mookerjee.—There is a suggestion that this University has not been following a correct principle on this point since 1891. In the regulation on page 148 of the Calendar the word "subject" has been understood to mean "subject for a particular examination." If a man is teaching mathematics in the B.A. class he is prevented by this rule from setting a paper in mathematics for the B.A. Examination only but not for any other examination. It is contended that this rule has resulted in excluding teachers, with the consequence that unsuitable questions are put which would not have been put had teachers been appointed examiners. But as a matter of fact if you examine the lists you will find that our papers are really set by teachers. With the exception of two or three instances all our papers are set by actual teachers. Of course these teachers are not teaching the subjects for the particular examination at the time of setting the papers. Even under the system which obtained before 1891 unsuitable questions were set as frequently as now. In fact my own experience is that the examiners who were teaching particular subjects set unsuitable questions in them for the reason that they knew too much of them—a fact which made their papers too recondite.

Mr. Justice Banerjee.—For the lower examinations?

Dr. Mookerjee.—Yes. The rule in question was introduced on the recommendation of a committee whose report was signed by Vice-Chancellor Banerjee, Messrs. Croft, Bose and Tawney. It was passed under the following circumstances. In 1890 the substance of the English and Sanskrit papers for the F.A. Examination appeared in various newspapers before the examination day. A committee of the Syndicate was therefore appointed to find out how this had happened. It examined a number of witnesses under the presidency of Mr. Justice Banerjee and found out that one professor from the Presidency College and another from the Krishnagar College had set papers in Sanskrit and English respectively and that they had given notes to their students marking important passages which enabled the more intelligent of them to know what their teachers' intentions were. Ultimately the whole of the result in Sanskrit and English prose was cancelled. The explanation given by the two examiners was that in giving notes to their students they had done nothing more than their duty as professors; that they were bound to tell their students what the important points were; and that if in doing so they had enabled the students to find out what the likely questions would be, that was only an unfortunate accident. The effect of cancelling the whole result in the two papers told unfortunately on students of distant places like Nagpur who were not likely to have known the papers beforehand. After cancelling the result the Syndicate adopted a very rough and ready method of doing justice to the students by doubling their marks in the other paper assuming that they had done equally well all round. Subsequently the Senate passed the rule now under consideration on the recommendation of the Syndicate. The rule is a sound one, and although there may be some inconvenience if questions are set by persons who are not actual teachers for the time being in particular subjects, still as a matter of fact the experience of the last 11 years shews that it is possible to get examiners from among those who have been teaching recently. In the case of Science and Mathematics there has really been no difficulty in getting examiners as we sometimes get the help of other Universities. There is no reason why we should not have examiners from other Universities. The contrary rule operates as unjust in three ways: First, there is the risk of questions being discovered; secondly, an undue advantage is gained by the students of the examiners who set the papers—that cannot be prevented; and, thirdly, it has a demoralizing effect on the students, for they procure notes of the professors who they know are to become examiners. In my time for the B.A. Examination, one of the Free Church professors was appointed an examiner in English. Although I belonged to the Presidency College I and other students of that College procured his notes. Even though the Syndicate had for sometime ceased to publish the names of the examiners the students managed to procure their names. There were two English books for that examination—one Addison's *Spectator* and the other "Locke on the human understanding." This Free Church professor had devoted three months to

lecturing on the latter work and in his paper we actually found that 30 marks were assigned to questions from it and that there was only one question from Addison. In justice to examiners it may be said that it is difficult for them as professors to keep back from their students what they are going to ask in the papers. I was myself lecturing in Mathematics in the Indian Association for cultivating Science many years ago and at that time I was also an examiner for the M.A. degree; I then found it extremely difficult to keep back from the students what I was going to set in my paper. I was then lecturing upon a portion of the Calculus and I was bound to teach it to the students and yet could not ignore it when setting my paper.

APPOINTMENT OF EXAMINERS.

Dr. Mukerjee.—So far as the appointment of our examiners is concerned our system is, as nearly as possible, perfect. There is a suggestion that a permanent Board of Examiners should be appointed. But I think our examiners are practically permanent in that they are re-appointed year after year. One of the great objections to having a permanent Board is that it would be difficult to remove an examiner if he were found to be incompetent unless one could make out a regular case against him. For this reason the present system of appointment is very satisfactory.

APPORTIONMENT OF MARKS.

Dr. Mukerjee.—Twenty years ago there used to be no marks assigned on the paper to the different questions; but that system worked great hardship upon the candidates, for they could not attach importance to any individual question. Supposing a paper was too long candidates could not make a selection of the questions which they should answer first. The old system may be retained for the M.A. Examination in which the candidates ought to be able to judge from the questions themselves what is required of them, but for the lower examinations like the Entrance and the F.A. the system of assigning marks to individual questions was necessary.

GRACE MARKS.

Dr. Mukerjee.—Some people seem to think that grace marks are given in order to pass a candidate who ought not to pass. Those who take that view of the question have not understood it properly. The allotment of grace marks is governed by different principles in (1) the Entrance and F.A. and (2) the B.A. Examination. In the Entrance and F.A., candidates are given grace marks according to a rule of the Syndicate number 20 on page 150 of the Calendar. I have been a moderator for the last 13 years and I am therefore in a position to explain to you what is meant by grace marks so far as the Entrance and F. A. candidates are concerned.

(1) In the Entrance Examination a candidate must obtain (a) a given minimum in each subject (33 per cent. in English and 25 per cent. in each other subject) and (b) a given minimum aggregate, namely, 33 per cent. In the examination 200 marks are given for English and 400 for the other three subjects. The minimum aggregate is therefore 198 and the total of the minima required for passing in each subject 166. A candidate must therefore make 32 more than the total of the minima in order to pass. Now grace marks are never given except to a candidate who fails in one subject only and not unless he gains at least 208 in the aggregate, *i.e.*, 42 marks more than the sum of the passing minima. Under these special circumstances grace marks are given up to a maximum of 5.

Mr. Justice Banerjee.—You allow a candidate's deficiency in one subject up to a certain point to be compensated for by minimum aggregate?

Dr. Mukerjee.—Yes; that is the principle on which grace marks are given. A candidate who fails in one subject only can be passed by means of grace marks. If a candidate has acquired even a very high degree of proficiency in English and Mathematics and fails in both Sanskrit and History, then his case is not considered at all with reference to grace marks.

(2) The above rule of grace marks does not apply to the B. A. degree, for the Syndicate has no control over the B. A. examiners. No grace marks are

allowed in this examination unless the character of the papers set demands that they should be given. For instance, in a case where questions are set from portions which are expressly excluded, grace marks are given. Sometimes also on a principle, somewhat similar to that which obtains for the Entrance and F.A. Examinations, if a candidate has done exceptionally well in one subject and just failed in another he is allowed to pass. Such cases are very rare. Grace marks are not given because the results are bad, unless the failures can be traced to a vital defect in the papers. Since 1887 I have known no case of grace marks being given in the M.A. Examination.

MEETING OF EXAMINERS.

Dr. Mukerjee.—Our examiners do not meet together before sending in their marks. In every subject the several examiners send in their marks and when they are summed up the total may just fall short of the minimum. If the examiners met and discussed the case they might think it desirable to pass the candidate.

REGISTRAR.

Dr. Mukerjee.—The Calcutta University ought to have a full-time Registrar. He ought to be something more than a mere head of his office; he ought to be the adviser of the Syndicate. He should be some body who knows all about the system of the University. Unless you have a life-time Registrarship you will not get a first-rate man. Your Registrar must, by reason of his position and attainments, not be inferior to the Principal of the highest college, otherwise he will not be able to maintain his dignity. He must be able to advise the Syndicate and command the respect of the members of that body. We have changed our Registrar six times during the last ten years. The Registrar's work is so heavy that if it is properly done no incumbent can do it at a stretch for more than three or four years. We must have for the office a distinguished man who knows all about the University, including its past history, and who will be able, when new rules are made, to watch how they work.

INSPECTION OF AFFILIATED COLLEGES.

Dr. Mukerjee.—I have already expressed my opinion that the University should periodically inspect the affiliated colleges. In this connection the question of finances becomes very important. I am afraid we have not at the present moment the necessary funds. The men appointed to carry out the inspection must be of the standing of the Principal of the best college in Bengal, otherwise there will be a great deal of complaint. Such men will have to be remunerated by a handsome salary and an adequate travelling allowance. If we have a whole-time Registrar he may do a part of the inspection work in addition to his ordinary duties. He can easily visit colleges at Dacca, Krishnagar, and Patna. If the sphere of our influence is limited we might perhaps be able to manage the matter with a whole-time Registrar and one other officer. I look forward not so much to the actual results of inspection as to its moral effect. I am sure that if colleges know that they are likely to be visited from time to time they will take steps to remove their shortcomings. Excepting Babu Surendranath Banerjee all the witnesses welcome the proposal of college inspection. Among the latter is the Principal of the Ripon College. He neutralises the opinion of his chief.

HOSTELS.

Dr. Mukerjee.—I think it is essential that there should be hostels for the accommodation of students who do not live with their parents, benefactors or guardians. I would make it a condition precedent to the institution of hostels that they should have not merely a Resident Manager or Superintendent but also a Resident Professor. A Superintendent on R50 or R100 will not be looked upon with respect by the students. They will look upon him as a mere Sircar who is engaged not to keep watch over the students but over the servants of the institution. A professor of the college should reside in the neighbourhood and visit the hostel. It has been said that the interference of a European Professor would be resented. I do not want the professor to interfere

with but to inspect the hostel. Mr. Abdul Karim made a very astounding statement that boys should be taken out of the control of their parents or *bonâ fide* guardians and made to live in hostels, because, he said, home influence is not very desirable. In answer to my question he said that he could not lay so much stress on the remark in connection with the Hindu as in connection with the Mahomedan community. I have since discussed the question with some of the leading Mahomedans and found that they are unanimously of opinion that it would be most unfortunate if students were taken from their parents' control and lodged in hostels. Speaking for the Hindu community I think such a step on the part of the University would be regarded with great dissatisfaction. Mr. Justice Banerjee or I myself would not consent to sending any of our boys to hostels unless such hostels were very different from what we take them to be.

Mr. Justice Banerjee.—I should think that home training prepares a student for the world better than any hostel training. Excepting from an intellectual point of view hostel training cannot prepare a student all round for the world with the same elasticity as home training.

COLLEGE GOVERNMENT.

Dr. Mukerjee.—Another point regarding the affiliated colleges is that many of them have practically no governing body at all. Their proprietors are the supreme power. It is desirable that they should have governing bodies. In Government Colleges the Principal does what seems to him fit without reference to any college council. The professors should not be ignored in this fashion. There should be a college council for the purpose of looking after the distribution of teaching work and so on.

President.—In England colleges are usually granted a charter by Act of Parliament, and statutes are laid down which they cannot alter, and bye-laws framed which they can. The principle implies that the colleges ought to have a constitution and that they ought to have governing bodies.

THE PAY OF TEACHERS.

Dr. Mukerjee.—Mr. Roy suggested that the teachers' pay ought to be regulated by the University. That, I think, is impossible. But this Commission may perhaps draw the attention of Government to the way in which the claims of the Education Department have been systematically ignored. It can be proved to demonstration that Government look upon the Executive and Judicial Departments as of far greater importance than the Education Department, and the consequence is that men whose qualifications may be inferior to those of persons in the Education Department have much better prospects in Government service than the latter.

Mr. Justice Banerjee.—How do the salaries of the Educational Department compare with those of persons who have joined other branches of public service?

Dr. Mukerjee.—A B.L. who becomes a Munsiff starts with a salary of R200, and may rise to be a Subordinate Judge with a salary of R600. A graduate who becomes a Deputy Magistrate starts with R200 a month, gets R250 in about three years and R300 in about seven years. Some of these graduates are now getting R400 after serving for 15 years. On the other hand, the Principal of the Sanskrit College who has been in service since 1879—in fact my fellow-students were his pupils—is getting only R300, and I am quite sure in the next four years he will not get more than R400. He says that from a pecuniary point of view he would have done much better if instead of becoming a Professor he had become a Munsiff.

Mr. Justice Banerjee.—He has been rewarded by Government with the title of Mahamahopadhyay.

Dr. Mukerjee.—People cannot live on titles. Scholars want money for the purpose of living and keeping up their scholarship. The Principal of the Sanskrit College was complaining that he could not afford to buy books with a salary of R300 on which he has to maintain a growing family. I think

this subject requires serious consideration. If Government think it to be their duty to promote education they must give greater facilities to graduates to join the Education Department.

The distinction between the Indian and Provincial Services is arbitrary. It inflicts a great deal of hardship on Provincial service men some of whom are doing exactly the same work as those belonging to the superior service. I venture to think that this question also is worthy of your careful consideration.

Mr. Justice Banerjee.—With regard to the lower grades of teachers, the proprietors of private schools will not raise the salaries of their teachers because they point to the small remuneration paid by the Government. They take the Government scale of remuneration as the proper scale.

Dr. Mukerjee.—Yes; the proprietor pays R40 to the head-masters and R20 to the other teachers saying that the Government pays R50 and R25.

ENDOWMENTS.

Dr. Mukerjee.—It has been suggested that we should not have colleges unless they are sufficiently endowed colleges. We may cause that principle to be applied to new colleges, but it cannot be applied to the existing ones. There was a time when it was necessary to spread education in the country as much as possible and colleges were therefore affiliated 20 years ago on conditions which will not hold good in the future. I am strongly opposed to having any more colleges in distant parts of the country which are to be maintained on a purely commercial basis. If people want to have educational institutions of a superior order in such places they must find money to make them self-supporting, so that they may not find it necessary to reduce the staff after the institution is opened. Sometimes colleges are opened as a matter of experiment. If for two or three years students do not come in the numbers expected inferior people are appointed to teach in the institution; I do not think that is desirable.

COMBINED LECTURES.

Dr. Mukerjee.—I do not think they are possible except in the case of higher examinations such as the M.A. For the F.A. and B.A. examinations they are not practicable for the reasons that, firstly, the colleges are situated far away from one another, and secondly, a feeling of rivalry exists between the different institutions. The question of the college routines would present great difficulty. The different college proprietors would have to arrange their own college lectures in such a way as to enable their students to attend them after attending the "combined lectures." These "combined lectures" are possible in the case of M.A. students because as a matter of fact, they have not to attend classes, for very few colleges have them. You have a class in the Presidency College, and there is also a class in the Ripon College.

Mr. Justice Banerjee.—That is held in the Professor's house?

Dr. Mukerjee.—Yes.

LEGAL EDUCATION.

UNSATISFACTORY CONDITION OF LEGAL EDUCATION.

Dr. Mukerjee.—From my own experience of the last 16 years and from what I have been able to gather from older people I can say that our law education has never been satisfactory; and if there are eminent lawyers, it is not due to the training which they have received in the Law class but to their own individual efforts. Before 1891 our students had to attend lectures for three years. They attended them for one year before passing their B.A., and for two years after passing it; the consequence was that in the first year they neglected their law course and devoted their whole time to study for the B.A. Examination. With the exception of very intelligent youths the B.A. students never read law before taking their degree. They used to be physically present in the class but never cared to listen to the lectures. After 1891 that system was changed and the course of study was reduced from three to two years; that is to say, the fictitious study of one year before the B.A. was abolished. The rule now says that no one should be allowed to study law until he has passed his B.A.

Even now a majority of students do not really listen to the lectures. There are several reasons for this. (1) A large number of the students are going up for the M.A. (2) Some attend the lectures without intending to appear at the examination immediately or in the near future, because they have not got the means which would enable them to begin practice; for according to a High Court rule a B.L. must join some court within the limited period of 12 months after taking his degree. So the students after passing their B.A. serve as teachers getting Rs 10 or Rs 15 a month and attend law lectures without any intention of profiting by them in the immediate future. (3) There are the usual number of idle students. (4) The teachers themselves got demoralised; they know that the boys do not care to learn and therefore they do not want to teach. It is a case of action and re-action.

If you draw comparison between the training received by Law students and that received by Medical students you will see that whereas the University prescribes that a M. B. candidate must attend a course of 1,365 lectures in five years, giving an average of 273 lectures a year, not including instruction in practical work, Law students are required to attend only 192 lectures in two years, making 96 lectures in a year; whilst the professors must deliver 288 lectures in the two years. In this number of lectures they have to deal with the subjects of Equity, Contracts, Jurisprudence, and Hindu Law within two years.

CENTRAL LAW COLLEGE.

Dr. Mukerjee.—The University should have a Central Law College under the control of the Faculty of Law. I would not at present disaffiliate the Colleges in Calcutta now affiliated in law. They should be given an opportunity of rising to the standard of the Model Central College. The Central College must have a good library and there must be many more lectures delivered than there have been hitherto. The question then arises whether the Law College should or should not be a day college. The main objection to having a day college is that it would be difficult to get efficient lecturers. You will not be able to obtain competent lecturers if you want them to deliver lectures from 11 to 4, for you cannot afford to pay them such salaries as will compensate them for leaving their profession. It will be better to have lectures in the morning and evening. Many of the students are articled clerks and it would be practically impossible for them to attend the lectures during the day.

The American method of instruction by disputations might be introduced as a supplement to the study of the texts and codes.

President.—Do you think it is an important thing to keep a law school of this kind in touch with the High Court?

Dr. Mukerjee.—Yes.

President.—That can be done with the help of a Council?

Dr. Mukerjee.—Yes; I think the leading barristers ought to be on the Council.

President.—In the case of Law students do you think any hostel would be desirable?

Dr. Mukerjee.—It would not be necessary in the beginning. Law students are not likely to go astray if they have not already done so.

MOFUSSIL LAW CLASSES.

Dr. Mukerjee.—I think they ought to be stopped. If the students want to learn law, they should be obliged to come to Calcutta.

President.—Many of them may be poor.

Dr. Mukerjee.—I would not make the Law class so cheap as to make it possible for men of insufficient training and means to become lawyers. Students should come to Calcutta and learn their profession properly.

Mr. Justice Banerjee.—If any Mofussil College is able to have competent men?

Dr. Mukerjee.—Then I don't object; I am afraid they will not be able to do it; at least they will not find it worth while to do it. It may be necessary to have a law college at Patna.

LAW EXAMINATION.

Dr. Mukerjee.—It was suggested by Mr. Kalicharan Banerjee that the Law examination should be divided into two parts, the first part being taken at the end of the first year. This might interfere with M.A. students and I would therefore suggest that those who are going up for the M.A. may be allowed to take the two parts together at the end of the second year.

Mr. Justice Banerjee.—Would not the candidates who are allowed to pass by instalments get an advantage over others?

Dr. Mukerjee.—If students are properly taught in the Law College of the description I suggest, then whether they pass the examination at one time or at two different periods of time, would not matter much.

Mr. Justice Banerjee.—Multiplicity of examinations is an evil.

Dr. Mukerjee.—It is sometimes an evil. The Medical Examination has been divided into three and the engineering into two parts on the ground that the examination taken as a whole would be too long for the students.

ROMAN LAW.

Dr. Mukerjee.—It has been suggested that Roman Law should be re-introduced. I do not think that would be desirable. If Maine's Ancient Law is intelligently read it is enough for all practical purposes.

EXPERTS IN THE SENATE.

Mr. Justice Banerjee.—It is sometimes said that non-educational element in the Senate has very often overruled the decisions arrived at by experts in educational matters. What is your experience on this subject during the last thirteen years?

Dr. Mukerjee.—I do not know of any instances in which experts have been overruled by non-experts except when the experts themselves have been fairly divided. I am speaking from my own experience of the last fourteen years. Your impression must be based on a larger experience.

Mr. Justice Banerjee.—Yes from 1878; i.e., for 24 years. I only remember one instance of that kind, and that was due to the injurious advocacy of the spokesman of the experts.

POST-GRADUATE SCHOLARSHIPS AND UNIVERSITIES FUNDS.

Dr. Mukerjee.—My own experience of the Senate is that sometimes very useful propositions are lost by reason of the want of tact displayed by their movers.

Dr. Mukerjee.—Another point I would like to mention is that the University ought to encourage the advancement of education by founding post-graduate scholarships.

Mr. Justice Banerjee.—Has it got funds?

Dr. Mukerjee.—Yes. There is one suggestion I would like to make regarding funds. Perhaps it will be received with disapproval. We might raise the fees for the Entrance, F.A., B.A., and B.L. Examinations. By increasing the Entrance fee by R2 you will get annually R14,000 more; and by increasing the F.A. fee by R4 you will get an additional R16,000. I do not think it will seriously affect poor students. At present there are students who have to beg even for the R10. It would not be more difficult for them to get R12. Mr. Justice Banerjee and I myself have often paid money to such students. The B.A. would give you annually an extra R12,000 if you increase its fee by R6 and the B.L. would give you R12,000 more if its fee were increased by R20. So the total would be about R54,000; this sum, together with R50,000 surplus which we get every year, would give us a lakh of rupees. This is quite within the range of possibility if only the University makes up its mind to do it.

Mr. Justice Banerjee.—Would it be proper to take the product of fees for post-graduate Scholarships?

Dr. Mukerjee.—As long as the object is laudable the question of propriety may be left in the background. If the University becomes a teaching body it will have to take some such action and found, say, 50 scholarships, some for the M.A., and others for research in connection with Indian antiquities. Personally I deeply regret that the University had no scholarship in my time. It would have enabled me to continue the pursuits of which I was fond instead of taking to the Law. Besides, every under-graduate who is taxed in this way, has a potential capacity of enjoying the fruits if he can come up to the mark. The University must be looked upon as *one* corporation.

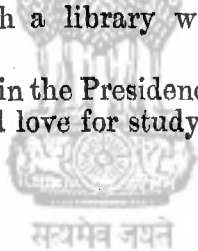
The fear has been expressed that if the standard is raised it will reduce the number of candidates. I do not think so. On the contrary, the number would be increased. Take, for instance, the Entrance Examination. Annually you get about 7,000 candidates of whom about 4,000 pass and 3,000 go back. These will mostly come again. An increase in the proportion of failures will therefore tend to increase the total number of candidates.

LIBRARY AND EXAMINATION HALL.

Dr. Mukerjee.—It has been suggested that the Presidency College suffers on account of the University examinations being held there and that therefore the University ought to make its own arrangements. The examinations are held in the college for at least four or five weeks in the year. If you have money you may have a building belonging to the University and a library to which our graduates and under-graduates may have access. The present University library is not of much use as it contains mostly rare books of reference. We have got German classics and such like works which are not useful to Indian students. A library for the use of graduates and under-graduates would perhaps be a legitimate object for which they might be taxed.

Mr. Justice Banerjee.—Such a library would have a good effect in discouraging the use of keys.

Dr. Mukerjee.—The Library in the Presidency College was invaluable to me in stimulating my imagination and love for study.





सत्यमेव जयते

SUPPLEMENT TO THE REPORT OF THE DISCUSSION WITH DR. ASUTOSH MOOKERJEE.

Mr. Pedler called attention to certain remarks of the Honourable Dr. Asutosh Mookerjee the Local Commissioner for the Calcutta University made at the sitting of the Commission on March 29th at which several of the Commission including himself, were unable to be present. Dr. Mookerjee had remarked on the undesirability of unaided schools which are recognized by the Calcutta University being placed under the inspection of the Education Department stating that the Deputy Inspectors of Schools are not men of high education and that many Inspectors and Deputy Inspectors ought not to be in those positions. Mr. Pedler explained that many Deputy Inspectors had been serving in the Education Department for twenty-five and thirty years and are undoubtedly not so good as the more highly educated men who are being appointed to these posts at the present time, but until the present incumbents retired it was impossible for a really satisfactory inspectorate to be formed.

Dr. Mookerjee also complained that the Text-Book Committee (in Bengal?) "is conducting its business in an extraordinary way" and that some of the text-books introduced through the medium of the Text-Book Committee "are the worst specimens of books to be introduced among young students." He also stated that owing to the constitution of the *new* Text-Book Committee, the Head Masters in Government Institutions, Inspectors and Deputy Inspectors get their books introduced. "In all schools, Government, aided, and unaided, that are placed in the hands of the Deputy Inspectors things are going from bad to worse."

Mr. Pedler explained that rather more than a year ago the Government of India had decided that there should be a change in the constitution of the Text-Book Committees in all the Provinces. The former Text-Book Committee in Bengal had been under the distinguished Presidentship of the Honourable Mr. Justice Gooroodas Banerjee and was composed very largely of gentlemen unconnected with Government and unconnected with the Education Department. The new Text-Book Committee contains more Government servants. It was true that schools were practically compelled to use the books which were in the list approved by the Text-Book Committee.

The new Text-Book Committee had however only been formed recently and had at first been occupied in framing the rules under which it should work etc., and the examination of new text books had been rather in abeyance.

The only list of books ordered to be used at the present time in schools in Bengal was the list prepared by the former Text-Book Committee and the new Committee had not issued any new list, so that if there was any force in Dr. Mookerjee's complaints the blame, if any, would have to rest with the old Text-Book Committee and not with the new Committee. It was hoped that there would be an improvement in school books in future. With regard to Dr. Mookerjee's remark that schools "in the hands of Deputy Inspectors are going from bad to worse," Mr. Pedler explained that there are no high schools in Bengal placed under the control of the Deputy Inspectors. But it is only high schools which are recognized by the Calcutta University. High schools are inspected by Inspectors and Assistant Inspectors only and Deputy Inspectors have nothing to do with such schools unless they are specially deputed by an Inspector to visit some particular high school for a special purpose.



सत्यमेव जयते

SUMMARY OF MADRAS EVIDENCE.

Teaching University.—There is a general agreement that the University of Madras ought to be recognized as a teaching body. Those who criticise the proposal do so in order to point out—(a) that the University is already, in a sense, a teaching body; or (b) that its resources will not enable it to provide directly for the needs of any large number of students.

If the University provides a body of Professors, with laboratories and other adjuncts of University teaching, it is suggested that the teaching given should be for the M.A. or other advanced course of study. Such advanced teaching might take the form of lectures or of guidance in more or less independent work to be done by the student. It is agreed that if advanced students are attracted to Madras in considerable numbers some provision must be made for their residence and general welfare. Dr. Miller looks forward to the establishment of teaching Universities at several centres, such as Bangalore, Trichinopoly, Trivandrum. Mr. Cook supported this view, and urged the special claims of Bangalore. The Commission feel that schemes of this kind belong to the future, and that no practical recommendation can be framed.

It was suggested that Government should withdraw support from first grade Colleges in the Mofussil in order to enlarge the scope of the Presidency College and to make it a centre of University teaching.

Sir B. Aiyengar would form a new centre of advanced study in or near Madras (say at Guindy or Palar) and would make this the centre of University teaching. It is difficult to see how the necessary funds could be obtained.

The suggestion that a list of recognized teachers may be formed was well received, except by some witnesses who seemed to fear that Colleges might be unduly restricted in their choice of lecturers. This the Commission think need not be the case if the rules under which a College can obtain recognition for its teachers are so framed as to avoid the interposition of unnecessary delays. The idea is an unfamiliar one, and it may be that some of the witnesses gave their opinion on a somewhat imperfect understanding of the suggestion put to them.

The Senate.—The witnesses consulted on this point, without exception, agree that the number of the Senate is inconveniently large. The number suggested as suitable by the majority is 100 to 120, but Sir B. Aiyengar thinks 30 to 50 would be enough.

Sir B. Aiyengar holds that the number may be reduced by cancelling all existing appointments and making a fresh start. Other witnesses would regard this as an extreme course. They suggest that certain names may be transferred, as opportunities occur, to a list of Honorary Fellows, and that power may be taken to strike off the names of those who do not attend Senate meetings. At the same time it is plain that large allowance must be made for circumstances in applying any attendance test. Thus, *e.g.*, a Professor living at Trivandrum who attends a meeting at Madras must travel 93 miles by bullock-carriage and 400 miles by train; he is absent a whole week from his ordinary duties and has to spend R100. It would not be fair to expect his attendance unless on very important occasions.

Some witnesses from the Mofussil are not satisfied with the representation they now have in the Senate, and it is contended that all heads of first grade Colleges ought to be *ex-officio* Fellows. Some would even add a Professor in each first grade College, and a selection of heads of second grade Colleges to the *ex-officio* list.

The rules under which certain Fellows are elected by the Graduates have been criticised. It is suggested that the requirement of twenty years' standing in the case of B.A.'s is unnecessary, and that the limit may be reduced to ten or five years. It is admitted that canvassing exists to some extent.

If the scheme for the convocation of Graduates, brought forward in 1883 and now laid before the Commission, be adopted, it is suggested that elections may be made at a meeting of Convocation.

Election of Fellows by the Senate has also been proposed. Some witnesses would prefer election by Graduates in their several faculties to election by the whole body: others object to this on the ground that a Professional Faculty, such as Engineering, may be a very small body.

There has been no general objection to the proposal that Fellowships may be conferred for a limited term: but Mr. Cook thinks that a terminable Fellowship would be considered less dignified than a Fellowship for life; and Father Jean holds that "our gifts should be like the gifts of God, without repentance." Mr. Cook also thinks that terminable Fellowships would increase the danger of changing and tinkering University standards, and it is thought by some that a Fellow appointed for a term and failing to obtain re-appointment might imagine himself to be aggrieved.

The Syndicate.—The evidence seems to show that the Syndicate, as at present constituted, works well, and commands general confidence. Some Mofussil witnesses think that their Colleges, having no direct representation on the Syndicate, are under various "disabilities:" they suggest the abrogation of the rule which requires a member of the Syndicate to be resident in Madras. The Madras witnesses point out that much of the Syndicate's work is done in Sub-Committees and by circulation of papers and that a non-resident member would not be available for these purposes.

There would, the Commission think, be no strong local objection to increasing the number of the Syndicate to 12, so as to allow seats to be assigned to representatives of Mofussil Colleges. Any increase beyond 12 would be deprecated on the ground that it would deprive the Syndicate of its character as an executive body.

The general impression is that no strong reason exists for placing the Syndicate on a statutory basis, but if its constitution is farther defined, witnesses are in favour of restricting the choice of the Senate, so that members of the Syndicate would be elected from (a) teachers in Government colleges, (b) teachers in private colleges, and (c) other classes of persons entitled to representation.

The Faculties.—As the Faculties are merely advisory bodies, the most important witnesses were of opinion that they may continue to be Committees of the Senate as at present: but the rule which makes it necessary to assign each Fellow to a Faculty appears out of place, unless the assignment is made in all cases with due regard to special qualifications. If election of Fellows by the graduates in a Faculty is permitted, it is for consideration whether Fellows assigned to that Faculty may vote, though not graduates.

Register of Graduates.—The opinions given were in favour of a Register of Graduates, and the imposition of a fee for inserting a name.

Registrar.—Mr. Sathianathan thought there was a certain advantage in having a Registrar who is not a whole-time officer, as men of high academic position may be induced to give part of their time to the duties of the office.

Examinations.—Dr. Miller is of opinion that candidates for University examinations would be of better quality if they were freed from the pressure of public examinations during their school-time. Another witness contends that the pressure of examinations in schools is not so severe as to cause any evil effect.

Some witnesses are in favour of a School Leaving Examination (to give entrance to employment in the public service) supplemented by an Entrance Examination (chiefly in English) for those who intend to take a University course. Other witnesses contend that the Leaving Examination, if it be the same for all schools, will be the Entrance Examination over again, and that if it not be the same it will be of no value as a test.

The witnesses are not in favour of allowing colleges to matriculate students without any University Examination.

On the question whether certificates of fitness are too readily given, there is a conflict of testimony. Some teachers act on the principle that any boy promoted into the sixth class should be sent forward to the Matriculation Examination if there is any chance of his passing, and Dr. Duncan is quoted in support of this view. It does not appear that Dr. Duncan meant to say more

than this, that headmasters should not promote boys into the Matriculation Class unless they have a prospect of qualifying themselves to pass : and that if a boy is in that class, he ought *prima facie* to be sent in for the examination.

Several witnesses are of opinion that mistake was made when the prescribed English book was omitted from the programme of this examination. It is argued that the text-book gave at least a modicum of good English, and that the boys now learn Manuals of English which give them no command of the language. The Government of Madras has declined to sanction a bye-law restoring the text-book.

The very large percentage of failures in the Matriculation Examination is accounted for by bad teaching due to the excessive size of the classes and by special causes, (1) laxity in the matter of promotion in schools, (2) the habit of overworking immediately before the examination, (3) the operation of rules (especially bye-law 131) which render it possible for candidates to present themselves for examination many years in succession.

A majority of witnesses were opposed to a downward age limit, but admitted that a rule fixing 15 as the limit would not work any great hardship. No strong opinion was expressed as to an upward age limit.

It was suggested by Mr. Chatterton that Physics and Chemistry might be omitted from the Matriculation with a view to give students more time for English. This was strongly opposed by Mr. Cook.

Mr. Clarke gave evidence to show that the variations in the Matriculation Examination were such as to indicate unnecessary and unfair fluctuation of the standard. The Syndicate appointed a Committee: refer to Report.

Objection is taken to the grouping of History, Geography, Physics and Chemistry as one failing subject, and it is difficult to defend this arrangement, which appears to have been accepted as an alternative to the abandonment of Physics and Chemistry.

First Arts.—Sir B. Aiyengar would dispense with this examination. He would make the Entrance Examination rather more difficult than at present, and would permit the candidate to proceed to a somewhat simplified B.A. Examination after an interval of three years. On this and on some other proposals brought before the Commission, it may be remarked that changes of system ought to be admitted only when clearly desirable. There are some advantages in having an examination in the middle of the Arts Course, at the point when candidates may be expected to specialize their work, and where an Honours Course (if such a course should be instituted) would naturally begin.

In the F.A. as in the Matriculation Examination there is some doubt as to the sufficiency of the test in English. We are informed that medical students who begin their professional studies after the F.A. are sometimes unable to follow the instruction given, especially in the practical part of their course, when the teacher has to speak rapidly and colloquially. This criticism, if well founded, has an important bearing on all departments of professional training and on the scheme for a Science degree.

The second languages offered in the F.A. may be either a classical or a Vernacular language. There is some difference of opinion as to the educational value of the Vernaculars, and some witnesses think that a classical language, to be studied critically and grammatically, ought to be required. The methods of teaching the Vernaculars and the classical Eastern language are generally considered to be unsatisfactory.

It is represented by two or three witnesses that Mathematics ought not to be a necessary subject in the F.A., and that some students have a natural incapacity for the subject, and derive no benefit from it. Mr. Hannumanta Rao thinks that the methods of mathematical teaching are antiquated; he would dispense with Euclid, and would enjoin the use of practical illustrations.

Some witnesses would omit Physiology and Physiography from the scheme of this examination.

B.A. Examination.—Professor Sathianathan would permit Honours candidates to specialize in one subject from the F.A. onward, but this view does not meet with general acceptance.

It has been suggested that a wider choice of subjects should be given to pass candidates. Dr. Miller thinks the M.A. is the Honours Degree of the University, and doubts the necessity for an Honours B.A. Course.

Some witnesses recommend an Honours Course with a view to making the pass Degree easier, but this view is disclaimed by Father Sewell and others who are in favour of an Honours Course.

Degrees in Law, Medicine and Engineering.—Mr. Chatterton suggested that the standard for professional examinations should be the same throughout India. Colonel Love and Colonel Brown think this unnecessary. They think test in each case should be such as to secure professional competence, and they see no danger of any undue advantage being obtained by candidates for appointments.

A candidate for the First Examination in Law must produce a certificate of attendance at Law lectures for three terms, *one* of which must be subsequent to passing the examination for B.A. or other accepted degree. It is for consideration whether it is expedient that students should begin to attend Law lectures before the termination of their Arts Course.

Affiliated Colleges.—Several witnesses refer the Commission to the Bye-laws and Regulations as containing the rules necessary to maintain the efficiency of the Colleges. It is admitted that the University does not at present possess any adequate means of ascertaining whether the rules are observed or not. The second grade Colleges are visited by Inspectors; but the Inspector is guided by the rules of the Department and is not directly concerned with University rules.

There appears to be no objection on the part of the Colleges to a somewhat closer supervision. Mr. Cook suggests that a Special University Officer may be appointed for the purpose; other witnesses think the Syndicate may depute one or more of its members to visit and report. It is not necessary to indicate the methods to be adopted, but it is desirable that, in one way or another, the University should satisfy itself from time to time as to the condition of the Colleges.

The second grade Colleges are properly described as High Schools to which F.A. Classes have been added. Some witnesses are dissatisfied with this state of things. Mr. Cook informed the Commission that he is responsible for about 400 pupils, of whom 200 are in the school department. The result of the system is that F.A. students are still treated as school boys, at a time of life when they should be made to feel that they have attained to a more independent and responsible status. In this and other cases, the question of separation is mainly one of resources. If the Bangalore Central College is to be a place for University students only, a High School must be provided for the junior boys.

Dr. Miller is strongly of opinion that the fees charged by Colleges should be fixed by rule, and that the rule should be strictly enforced. The majority of the witnesses seem to think that any such rule would be easily evaded, and some contend that competition is not altogether an evil.

The University has made a regulation in regard to the residence of students. The rule is a new one, and is not always observed. Some heads of Colleges admit that students have been known to reside in unsuitable place; but it appears that in most of the Colleges represented by witnesses pains are taken to ascertain the residence of each student.

The hostel system has made considerable progress of late years.

Games are cultivated with success in many Colleges, and the European members of the staff take an interest in this side of College life. Gymnastic apparatus is also provided in some Colleges.

The Health of Students.—Vaccination is enforced by Government orders. As to eyesight refer to the report of Mr. Ramaswami Aiyer.

It is for consideration whether any place can be recognised as a "hostel" unless it is a place exclusively occupied by students and teachers or others placed in charge; also whether students not living with parents or relatives may not with advantage be required to reside in a hostel.

An abstract of the discussion of Bombay evidence which took place on 8th March 1902.

The President explained that the meeting was for the purpose of discussing the Bombay evidence and of hearing the views of the local Commissioner, Mr. Justice Chandavarkar. It was decided that in addition to joining in the discussion Mr. Justice Chandavarkar would prepare a written statement of his views.

TEACHING UNIVERSITIES.

President.—The Bombay evidence is to the same effect as that given in Madras. The idea of a Teaching University is accepted, and if recourse is had to legislation it is considered that it should be used to remove any doubt that may exist regarding the functions of the University. No one, however, expects any great or immediate effect from the legislative authority. The colleges are spread over too wide an area, and no sum is available from which funds could be obtained to establish a competent professorial body. Here, as in Madras, if the University takes a direct part in teaching, the first object to be aimed at is the improvement of science instruction by the provision of laboratories and appliances. The University can directly assist the colleges, first by making scientific instruction practical in its early stages, and secondly by giving the students greater facilities for post-graduate studies. Those who, like Mr. Scott, oppose the suggestion do so either because they consider that the University is already a teaching body or because they think that the idea is not practicable and that the University will not in an appreciable time have sufficient funds for the purpose.

Syed Hossein Bilgrami.—Even Mr. Scott approved of inter-collegiate teaching and perhaps of University science teaching. The physical difficulties were considered to be less in Bombay than in other places; the colleges are not so far apart.

Dr. Bourne and Mr. Pedler.—The persons recommending that the Universities should teach science were not really experts competent to give an opinion. The matter would have to be very carefully thought out in detail.

Mr. Pedler.—Colleges might be affiliated only for certain special courses to which they might devote the whole of their strength. The Universities could insist on this.

Mr. Hewett.—How could that be done with existing institutions?

Dr. Mackichan.—The new teaching is higher than the old; the old would remain for the B.A. course.

President.—A school of science rather than a college is contemplated.

Mr. Justice Chandavarkar.—The mere appointment of a number of professors to teach will have no effect on the minds of the students. Even for the higher teaching the tutorial system is essential. At present some advanced lectures are given on languages and are very sparsely attended.

President.—That is because they do not bear on any examination.

Mr. Justice Chandavarkar.—The minds of the Indian students must be excited and constrained to effort.

Dr. Mackichan.—Higher scientific teaching must be largely tutorial because of the practical work.

Mr. Hewett.—College students in India are boys and ought to be taught like boys, for instance, they ought to be called upon to construe before the class. Therefore large classes are not satisfactory. In one of our college

visits I found the students in the History class taking down what appeared to be an epitome of the text-book to be learnt by heart. They had not the least idea of what it meant.

Mr. Justice Banerjee.—A good system is to give three-fourths of the time for lecture and one-fourth for questions, the lecturer now and again pausing to let the students take down certain points. The students should prepare abstracts of the lecture and these should be examined by the lecturer; but the difficulty is of want of time.

SPHERES OF INFLUENCE.

President.—Nothing of great importance has been said on this subject. The sphere of influence of the Bombay University is well defined, and no one except Dr. Masina wants to go beyond it.

Dr. Mackichan.—It is a question whether the Nagpur colleges should not be affiliated to Bombay.

Mr. Hewett.—The tendency is for the Central Provinces colleges to be affiliated to Allahabad, and the Chief Commissioner has been officially recognized in the Allahabad University.

Dr. Mackichan.—Originally they went to Bombay and were attracted to Calcutta because the examinations were easier and the centres of examination more widely scattered.

Mr. Hewett.—Sambhalpore must remain with Calcutta because the language is practically Uriya.

Mr. Pedler.—In language and distance the country near Nagpur belongs naturally to Bombay. There is a great difficulty in Calcutta in securing Examiners for the large number of vernaculars.

Mr. Hewett.—The Central Provinces being now with Calcutta and Allahabad is it desirable to change and encourage them to go to Bombay?

Inter-University Relations.

Dr. Bourne.—An important question allied to the spheres of influence is whether or not the Universities should recognize one another's examinations.

Dr. Mackichan.—Madras refuses to recognize our examinations.

Dr. Bourne.—In general the matter is taken away from the bye-laws and the Syndicate decides each case. It practically refuses to recognize unless there has been a change of residence.

Dr. Mackichan.—In Bombay we have always declined to allow a B.A. of Calcutta or Madras to take his M.A. here. We think the M.A. ought to be taken where the B.A. is taken.

Mr. Pedler.—That principle might give rise to difficulties. Chemistry students used occasionally to come to Calcutta from Madras where the instruction was not so good, and sometimes did very well.

Mr. Justice Chandavarkar.—At present candidates who cannot pass here think that they may be able to get a degree elsewhere. That ought to be stopped.

Mr. Justice Banerjee.—There may be good reasons for changing the University and in such cases the University ought to be obliged to accept the student.

Dr. Bourne.—Each University aims at a rational course. The students by changing the University may omit an essential part of the course.

President.—The rule might be that there should be no crossing over without special permission. The reason for the vagueness which has appeared in the evidence on this subject is that the graduates of the three older Universities know little about any University except their own.

THE SENATE.

President.—There is practically unanimity that the number of the Senate should be reduced. Even Mr. Daruwalla would reduce it to 200; the

majority would reduce it to between 100 and 150. The Vice-Chancellor would make it between 30 and 50 as in the original Senate.

Mr. Justice Chandavarkar.—One hundred and twenty is a very good number. If there were 120 interested in education, 100 would attend.

Mr. Hewett.—Only 13 were present at the last annual meeting. The Senate meets much more frequently in Bombay than in Calcutta.

Dr. Mackichan.—Nothing but a disputed election or a controversial point will cause a full meeting.

Dr. Bourne.—The new Senate will not contain many men who are not in the present Senate; why then should a smaller Senate give a larger attendance?

Mr. Justice Chandavarkar.—I ~~want~~ to get rid of the popular element ~~and~~ to increase the attendance. Many of the meetings are merely of a formal character, and ~~do~~ do not attend them. The quorum should be raised.

Dr. Mackichan.—We have had to send over to the High Court to obtain Fellows to make up even the present quorum of six.

President.—The next point is the *method of translation* from the large to the small Senate. The learned Judges from Madras and Bombay contemplate a clean sweep: a repeal Act and the incorporation of a new University. Other witnesses do not appear to be quite clear on the point. Some contemplate a gradual change which would take a long time to work out.

Mr. Justice Banerjee.—One proposal is that this Senate should elect a new Senate.

Dr. Mackichan.—Would not the making of Fellowship terminable be a gentle way of cleaning the slate?

Dr. Mackichan.—There is a proposal to make some of the Fellows Honorary; but witnesses say that people would not like to be made Honorary Fellows.

President.—I think they would not like it.

Mr. Justice Chandavarkar.—It would probably be regarded as a sort of censure and would not be liked.

Mr. Hewett.—I fear it would be disliked.

Mr. Justice Chandavarkar.—Any change that has to be made must be made boldly. There is no good in having nominal Fellows. I should prefer a clean sweep and am opposed to a middle course. There is the precedent of the Justices of the Peace who were deprived of all powers, and no serious objection was raised.

Mr. Justice Banerjee.—Another plan would be to reconstitute the Faculties and make them do the work, and to abstain from placing all senators on Faculties. That would make a good many practically Honorary Fellows.

Mr. Pedler.—Some incentive should be left to donors.

President.—The creation of Honorary Fellows would be an appropriate reward for the future, but it would be a mistake to transfer to the Honorary list all who are not satisfactory Fellows at present. That would spoil the meaning of Honorary Fellowship.

Mr. Justice Banerjee.—There is much to be said for the proposal to retain the Senate as it now stands and to limit its power. The power of the Faculties may be increased.

President.—Faculties must be advisory bodies only; or there would be contention between them.

Mr. Justice Banerjee.—You may have new Faculties and entrust the Government to a general meeting of them.

Mr. Justice Chandavarkar.—That would come to the same thing as the other proposals.

President.—There appear to be two courses—one to make a clean sweep and the other to lay down rules for the future.

Dr. Mackichan.—A difficulty in the way of limiting the appointment of fresh Fellows would be the large number of applications that are made. About 150 are always with the Government of Bombay.

Mr. Hewett.—That is not the case with the Governor General in Council.

Mr. Justice Chandavarkar.—To stop nomination for the present would be difficult, because there will be good men whom it will be desirable to bring into the Senate.

President.—One nomination may be made for every two or three vacancies.

Mr. Hewett.—The result of this would be the elimination of all European members except educationists.

Dr. Mackichan.—The clean sweep would make the Universities understand that they are called upon to do something better in the future. It would give impetus to reform. It is always better in India to do things frankly and boldly.

Mr. Justice Chandavarkar.—Mr. Sayani said it would be taking away our rights, but it is not a right.

President.—We must act with great care; where a distinction has been given it is difficult to take it away. Fellows might say “you appointed us without our seeking for nomination, and now you cast a slur on us by taking away the appointment.”

Mr. Justice Chandavarkar.—The first thing is the interest of the University. That should not give way to any sentimental considerations; there would be some dissatisfaction but not very much. There is some feeling here against ~~certain~~ leaders of the popular party, who are said to dominate the Senate. Some of them will remain. The new Senate ~~will~~ not be entirely composed of educationists.

Dr. Mackichan.—There are some of them whom I should be sorry not to have.

Mr. Justice Chandavarkar.—If a few more European gentlemen had taken greater interest in the Senate things would have gone on much better. The legal profession are specially to blame in this matter.

Mr. Hewett.—It is a great defect that junior Civilians are not appointed on the Senate. Now-a-days they are University men and many have taken high honours. Government should appoint them and insist upon their taking an interest. It is bad that the University should be so completely dissociated from the Civil Service.

Mr. Justice Chandavarkar.—They would be transferred before they became thoroughly acquainted with the Universities.

Mr. Hewett.—They not infrequently stay for several years.

Mr. Pedler.—Our Secretary to Government in the Education Department is not in the Senate.

Dr. Mackichan.—It would be a good thing if the High Court Judges took an interest.

Dr. Bourne.—Our High Court Judges constantly attend.

Mr. Justice Chandavarkar.—Look at the political aspect of the question. There is a constant outcry against the method of higher education and yet the Europeans do not take proper interest in it.

Dr. Mackichan.—Some Civilians have been on the Senate and have not taken interest in the University.

Mr. Hewett.—What is required is young Civilians who should be utilized when fresh from the English Universities.

President.—They should be put in the Senate, and told that Government expects them to attend meetings and to take an interest in the University.

Mr. Justice Banerjee.—Even if you do make a clean sweep you cannot treat all alike, because some you would re-appoint and some you would not.

Mr. Justice Chandavarkar.—Of those left out a large number would feel aggrieved.

METHOD OF ELECTION OF FELLOWS.

President.—The question has been raised whether election should be by voting papers or by a majority of those present at a meeting.

Dr. Bourne.—It might be a good plan for the electors to submit several names from which Government should choose.

Mr. Justice Banerjee.—That would not be good. If the voting is given at all it should be given freely.

Dr. Mackichan and Mr. Justice Chandavarkar.—It would not be advisable to limit the power of election.

Mr. Pedler.—There is evidence that there is a good deal of canvassing.

Mr. Justice Chandavarkar.—There will always be canvassing of some kind ; but it has not been so bad in the Universities as in the Municipalities and other bodies. There has been no corruption and on the whole the graduates exercise their power well. I think that up-country graduates should be allowed to vote.

Mr. Hewett.—In the case of Calcutta notices regarding the voting are sent to Magistrates all over India.

Mr. Justice Chandavarkar.—I do not like limiting the vote to Bombay. There might be centres for receiving votes.

Mr. Justice Banerjee.—If the vote were confined to Calcutta junior men would be elected, because it is mainly the junior men who are in Calcutta.

Dr. Bourne.—How is it that only graduates can be Fellows in Bombay ? The Madras rule is different.

Mr. Hewett.—Bombay and Madras followed the Government of India orders for Calcutta. Bombay is nearer the original than Madras. In Calcutta the Registrar informs the Government of India of the number of vacancies, and the number of persons to be elected is decided with reference to this and other considerations.

Dr. Bourne and Dr. Mackichan.—In Madras and Bombay two are elected each year as a matter of course.

Mr. Pedler.—It is desirable to limit elected Fellows to graduates of high standing. It is difficult, however, to limit the election to honours men because some of the others turn out better in the long run. We are getting too many electors in Calcutta. There are now 1,500 M. A.'s. alone.

THE SYNDICATE.

President.—The impression in my mind is that the Vice-Chancellor is right in saying that the Syndicate should be either larger or smaller than it is at present. If it is looked upon as a representative body then it should be made larger for the purpose of the representation of the colleges. If it is regarded as a Committee for current business then it should be smaller. In Madras they are quite satisfied with the Vice-Chancellor and 8 Syndics.

Dr. Mackichan.—A third view is that there should be a large Syndicate with an executive element in it.

Mr. Justice Chandavarkar.—That would be too complicated an arrangement. It is not always possible to distinguish between executive and administrative subjects. There would be too much devolution of responsibility and there might be friction.

Mr. Pedler.—The large amount of business makes it desirable that there be a large Syndicate with a number of Sub-Committees. That system is in use at the Calcutta Museum and has worked well. It might be introduced

If the Syndicate is to be a small body of 9, we could not transfer powers to it, although it would be reasonable to make it a representative one.

The proposed to the present powers is that the appointment of Examiners and conduct of the examination should be final.

Mr. Pedler.—That is even worse in Calcutta with 2 or 3 or even only 1 out of 10.

Mr. Justice Banerjee.—The reformed Senate will lead to a more representative Syndicate.

Dr. Mackichan.—In Bombay there is a strong body of evidence in favour of representation either to a larger or smaller degree. There is never a full Syndicate in Bombay except when examiners are appointed.

President.—In Calcutta all Syndics attend.

Mr. Pedler.—Fifteen to twenty might be a suitable number.

Dr. Bourne.—Such a body could not appoint Examiners.

President.—There would have to be a Committee for Examiners. It might be the representatives on the Syndicate of the Faculty.

Dr. Mackichan.—It is desirable that the moffusil colleges should be represented on the Syndicate, not because they have separate interests, but in order that they may keep in touch with the interests of the University.

Mr. Justice Banerjee.—The Director of Public Instruction and two heads of colleges by rotation should be members of the Syndicate. In that way a small Syndicate might be made a representative body.

President.—I am disposed to think that the Director of Public Instruction should be an *ex-officio* member.

Mr. Justice Chandavarkar.—Representation of colleges is even more important. A great deal of work falls on the heads of colleges, and it should not be left to chance whether or not they are members of the Syndicate.

Mr. Pedler.—The number of colleges makes such a representation difficult.

Mr. Justice Chandavarkar.—New colleges have not the same title to representation as the old and important colleges. New colleges might have representation by rotation.

Dr. Mackichan.—I remember the day when it was impossible for any non-Government college to be represented on the Syndicate. It was the rule that the Syndicate should contain one Professor of a Government college, one native member of the Senate and one European member not connected with education. That practically filled up the Arts vacancies.

Dr. Bourne.—When there are vacancies in the Syndicate that body might itself present nominations to the Senate.

Dr. Mackichan.—An attempt might be made to require the Senate to elect for the Syndicate a certain number of certain classes of persons. The directions would require to be put in general terms because of the difference in the conditions of the several Universities.

FACULTIES AND BOARDS OF STUDIES.

President.—The evidence is practically unanimous in recommending that Boards of Studies should be constituted.

Mr. Pedler.—We have had them for twelve or fifteen years; the members are not always experts; they are appointed by the Faculties.

Dr. Bourne.—With us they are appointed by the Syndicate.

Mr. Justice Banerjee.—Appointment by the Faculties is the

President.—They are only required in Arts. Faculty itself does the work of the Board of Studies.*

Mr. Hewett.—It would be difficult in Bombay to have Boards of Studies from the Medical Faculty. It would do better.

Mr. Pedler.—I should prefer the

Dr. Bourne.—It has always been made by Faculties

President.—That is a reason for giving to the Syndicate. If the Bombay Faculty of Medicine appointed the Board of Studies they would carefully exclude the experts.

FACULTY OF SCIENCE.

President.—It has been suggested that a Faculty of Science should be created and that the Engineering Faculty should be included in it.

Mr. Pedler.—If you did this you might as well include medicine.

Dr. Bourne.—It is difficult to have both a science degree, and science included in the Arts' course.

Dr. Mackichan.—Science is required for general education.

Dr. Bourne.—Then the two should be as distinct as possible.

Dr. Mackichan.—We made a mistake in making the B. Sc. and B.A. courses parallel. The B. Sc. should presuppose a good Arts training, and therefore the bifurcating point should be high.

Mr. Pedler.—Science was kept in the B.A. course in Calcutta for the sake of vested interests. It was a compromise for the colleges who could teach science for the B.A. but not for the B. Sc. degree.

Dr. Mackichan.—Many educationalists have been trained in the idea that science is an important part of general education. That idea is certainly prevalent in Scotland. I am of opinion that the omission of science from the general B.A. course would be an injury to India.

Dr. Bourne.—That is not my experience.

Mr. Pedler.—The education of an Indian is not complete without some science.

Dr. Bourne.—My objection is to persons pretending that they have studied science when they have only acquired a superficial smattering.

GRADUATES.

President.—Not very much was said on this subject except that a general opinion was expressed in favour of registration. One witness was in favour of conferring degrees on teachers from other Universities. The latter point is not of very great importance. I proposed it in case there should be any duty or privilege conferred on graduates which the teachers ought to share.

A question was raised whether the small percentage of passes showed that certificates were granted too easily.

Mr. Justice Banerjee.—I don't think that the percentage in Bombay is too small.

Mr. Pedler.—Sending up appears to be lax.

Mr. Hewett.—Private tuition arrangements are the greatest evil.

Dr. Mackichan.—The worst feature is that it enables the heads of schools to show false certificates by sending up only the boys of whom they are sure and allowing weak boys to go up as private students.

Mr. Justice Chandavarkar.—I have known of a headmaster who made it a boast that he gave certificates to his worst boys as private students.

Dr. Mackichan.—It is a grave evil and all interested in education are opposed to it. It may be cured by laying down general rules regarding certificates.

Mr. Justice Banerjee.—No school student should be admitted to the examination unless the head of the school has signed a certificate.

Dr. Mackichan.—Boys have sometimes gone up as private students without the knowledge of headmasters, and when it came to their knowledge some of them reported but the majority kept quiet. It would be well to enact that no certificate of a private teacher should be received unless he is registered by the University.

Mr. Hewett.—That would encourage private tuition. The proper remedy is to have recognized schools and to lay individual cases before the University. It is good for the majority of boys to go to school; exemption may be granted to boys of weak health, and to those whose position allows them to have good private tutors.

Mr. Pedler.—In Bengal a boy who does not come from a school must produce a certificate from the Inspector of Schools. The Inspector sends him to the Zillah School for examination and if he passes it he gets a certificate.

Mr. Justice Banerjee.—The certificate should state that the student is a *bonâ fide* private student.

Dr. Mackichan.—One cannot depend upon the accuracy of the certificate.

President.—The remedy does not lie in changing the form of words but in imposing a more efficient check.

Mr. Justice Banerjee.—It would, however, be good to insert in the certificate the following words:—"But from the results of class exercises and test examinations I certify that he is likely to pass."

Mr. Pedler.—That would be all right with good headmasters.

Dr. Mackichan.—The University should not publish the proportion of passes to candidate sent up; the proper criterion is the proportion of passes to the number on the rolls. The University ought not to publish statistics of this nature which can be used for advertising purposes. Competing private schools publish their results in the newspapers.

AGE LIMIT.

Mr. Justice Banerjee.—The tendency of Bombay witnesses may be taken as in favour of an age limit of 15 years.

President.—I think most of the witnesses were in favour of 16 years.

Mr. Justice Chandavarkar.—I think we should revert to the rule requiring the age of 16. That rule was cancelled firstly to allow boys to go to England at an early age, and secondly because of false certificates. The first reason was the more important one. It is not desirable to encourage boys to go to England when very young unless they are going in for the Indian Civil Service when they don't want an Indian degree.

STUDY OF ENGLISH.

President.—There is some complaint that students find it difficult to understand English, but it is admitted that the defect is soon cured. The most important point was the contention that more marks should be given to composition, paraphrase and the translation of unseen passages.

Dr. Bourne.—Some witnesses thought that the translation test is very badly carried out.

Dr. Mackichan.—But they admitted that it is a good test if well carried out.

Mr. Justice Banerjee.—They prefer paraphrase because it requires the understanding of an English poetical passage—an advantage which is lost in translating from vernacular.

Mr. Justice Chandavarkar.—I would have both.

Dr. Mackichan.—The rule was altered on account of the European candidates.

Mr. Pedler.—We get over that difficulty by a separate test.

Dr. Mackichan.—I am in favour of a thoroughly careful translation test. It is not as yet well applied. The same piece is translated into all the vernaculars and the examiner who corrects the papers is not acquainted with the vernaculars.

Mr. Justice Banerjee.—In Calcutta it is complained that the translations are not always intelligible.

Mr. Justice Chandavarkar.—I think one reason of the English difficulty is the abandonment of paraphrase. I do not believe in an oral test, there is not enough time for it.

Mr. Pedler.—If the matriculation examination were made smaller it could be done.

Dr. Bourne.—Or if those only were admitted to oral examination who passed in the papers.

Dr. Mackichan.—Some examiners drive boys into a state of trepidation and sometimes the best boys get the worst marks.

Mr. Pedler.—There should be more English reading of all kinds.

Mr. Justice Chandavarkar.—There should be no text books for Matriculation for they result in concentration on the books and notes.

Mr. Justice Banerjee.—I don't think there is anything very wrong in prescribing text-books if equally difficult unseen passages are also prescribed. Examiners and teachers are as much to blame as boys for the prevalence of cramming.

Mr. Pedler.—If you abolish text books the examiner has not the same chance of setting questions that can be crammed.

MEDICINE AND LATIN.

President.—Medical witnesses are in favour of medical students learning Latin—Dr. Masina on the ground of conformity with the European standard, and other witnesses because Latin is very useful for medical students.

Mr. Justice Chandavarkar.—As a matter of fact most of them learn Latin.

Dr. Mackichan.—The objection to make it compulsory is that there are not facilities for studying Latin all over the country.

Mr. Justice Banerjee.—It is also of great importance that medical students should know Sanskrit. It would be an advantage to him and to his country if he became acquainted with the accumulated store of medical knowledge that exists in India.

Mr. Pedler.—It is not until a man has made great progress in both Science and Sanskrit that he can make useful investigations in this direction. It has taken Mr. B. C. Roy 8 or 10 years to make a start.

Dr. Mackichan.—The best way would be to translate Sanskrit works and thus make them accessible to all.

Mr. Justice Chandavarkar.—Many dabble in the subject of indigenous medicine without understanding it; but it shows that the spirit of investigation is abroad.

Mr. Justice Banerjee.—The balance of evidence is in favour of the study Latin by medical students.

Mr. Justice Chandavarkar.—Most eminent Indian doctors have been ignorant of Latin.

ENTRANCE EXAMINATION.

President.—We shall have to consider Mr. Giles' scheme to supersede the University school final examination by a general school final to be undertaken by the Education Department, and to permit the Government, the University, or any other authority to impose any particular test it may think necessary for its own purposes.

Dr. Mackichan.—It is rather a bifurcation at a special point. Four general subjects are first studied, and then there is bifurcation on one side for the University and on the other side for the school final examination.

Mr. Pedler.—Mr. Giles did not get over the difficulty of dealing with so many candidates. There might be a school final divided among circles and six months later the further part of the examination.

Mr. Justice Banerjee.—Some witnesses preferred a single examination. There does not appear to be any complaint of difficulty arising owing to the large numbers.

Dr. Mackichan and Mr. Justice Chandavarkar.—There is difficulty.

Mr. Justice Banerjee.—The scheme has the defect that it would multiply examinations.

Dr. Mackichan.—It is a question whether College boys need go through the whole school final. If they did not, it would be one examination in two parts.

Mr. Justice Chandavarkar.—Is it desirable to make provision for mercantile examinations?

Mr. Pedler.—In Bengal there is an additional examination for commercial education.

Mr. Justice Chandavarkar.—With reference to Mr. Justice Banerjee's objection the difficulty is that we do not know what we are striving for when we have two aims in view in one examination.

Mr. Justice Banerjee.—Some subjects answer both for the school final and the entrance examination. There might be a separate examination for commercial education. The multiplication of examinations is very objectionable, and it is not worth while incurring this evil to prevent a large examination.

Mr. Justice Chandavarkar.—I would do away with the school final examination and keep matriculation as it is.

INTERMEDIATE EXAMINATIONS AND THE B.A.

President.—The next question is whether there should be two examinations between the matriculation and the B.A. I think the defence of two examinations was rather half-hearted. The opinion given is not very strong.

Mr. Justice Chandavarkar.—In my time the course for the F.A. was two years and for the B.A. one year. The arrangement of periods was not good. There were five subjects for the F.A. Every six months there was a college examination, and deserving students obtained scholarships and prizes. We did some work beyond the class work. Now students have so much to do that they never travel outside the curriculum. I would retain the four years' course but would only have two examinations. I would leave it to the professors to see that boys worked. The F.A. course should be two years and the B.A. the same period. The University has been a prey to faddists who continually tinker the course. It does not so much matter what is taught as how it is taught. First there should be a broad general basis and then specialization on the top of it. In the F.A. I should revert to the following five compulsory subjects:—

1. English.
2. History.
3. Mathematics.
4. Second language.
5. Chemistry and Physics.

For the B.A. the scope should be wider and the course more specialized. English and Classical languages should be compulsory and the students should take up other optional courses.

Dr. Mackichan.—The optional subject of literature should be removed. It makes the examination all languages.

Mr. Justice Chandavarkar.—I am against the examination by compartments. There was a long fight on the subject and in the end a compromise was effected. It leads to a lot of cramming and the students forget the subjects as soon as they pass them. Students should be required to pass in all the subjects at once.

Dr. Mackichan.—I agree with the proposal that the previous examination should be abolished. The F.A. should be substituted for the previous examination in so far as it is a test for Government service.

MEDICINE.

Dr. Mackichan.—At one time there was keen contention about medical degrees, the main question being the preliminary qualification required. If the L. M. and S. is converted into the M. B. degree the preliminary qualification will have to be raised to the F.A. Medical students used to pass the same chemistry examination as students in Arts. Now they have a separate examination.

Dr. Bourne.—The same thing has occurred in Madras. Medical men said they required a special examination for their students. That is nonsense. Special chemical knowledge is required in studying medicine, but not in the preliminary matriculation test.

LAW.

Mr. Justice Banerjee.—Mr. Davar is of opinion that it is desirable to have a day school. It is not quite clear whether he wishes to increase the number of hours of instruction.

Mr. Justice Chandavarkar.—There is no need for a day school. No complaint has been made regarding the men turned out for some years past. The advantage of the night school is that students can do other work or study during the day. But the lectures are valueless at present. First rate lawyers won't take up the work and third rate lawyers merely use text books, and the students take no interest in their lectures. Sir Lawrence Jenkins has been considering the question of encouraging original lectures, but at present the Law school is said to be mainly a refuge for briefless lawyers.

Mr. Justice Banerjee.—You should be able to get good graduates who have not got on in practice.

Mr. Justice Chandavarkar.—Some years ago a Law School Committee was appointed to investigate the management in consequence of an agitation that was started for a second school. The school is at present better managed than it was before the work of the committee. But much more interesting lectures might be given in Muhammadan or Hindu Law or in equity.

President.—It is difficult to acquiesce in a plan under which there is no attempt to make students pay attention to the lectures.

Mr. Justice Chandavarkar.—A difference might be made in the formula of the certificate. Students are inattentive to lectures such as are given at the present time, because they think that they can read the books for themselves. Therefore it is very necessary to make lectures stimulating. The programme is too long and elaborate, and students do not go through it.

Mr. Justice Chandavarkar, Dr. Mackichan and Mr. Justice Banerjee.—There should be no law in the Arts course.

Mr. Justice Chandavarkar.—The introduction of law in the Arts course was due to Mr. Latham and his party threatening to oppose the new B.A. course unless law received recognition.

Mr. Justice Banerjee.—It would be much better to have a two year's law course to be begun after the B. A. examination.

Mr. Justice Chandavarkar.—The High Court insists on the inclusion of practical subjects, such as statute law, in the examinations. The original idea was to study only the principles of law.

President.—Statute law may be regarded as a concentration of principles.

Mr. Justice Chandavarkar.—I think that the inclusion of the Procedure Codes in the course is sound.

AFFILIATED COLLEGES.

President.—On the question whether it is desirable that the University should exercise supervision over the affiliated colleges, the evidence has not been hostile. The general opinion appears to be that it should be laid upon the University as a duty to satisfy itself from time to time that the colleges obey the conditions subject to which they were admitted to affiliation. Mr. Scott, on the other hand, thought that the loss of pupils that would result from inefficiency was a sufficient check. As regards the manner of carrying out the supervision witnesses have not given much assistance. It was not suggested that special officers should be appointed. Usually the proposal is that the Syndicate should depute one or more of its members. The difficulty is that these persons are too busy to engage in systematic inspection. It is doubtful whether the system would not sometimes give rise to trouble. That is to say, colleges may resent the visits of Syndics, and these must be conducted in a very tactful way. The danger is not perhaps great but it undoubtedly exists.

Mr. Justice Chandavarkar.—The University should be able to disaffiliate a college when unfit professors are appointed.

President.—Without formal investigation the Syndicate, learning that certain matters were wrong, would give a hint which would be taken by the college.

Dr. Mackichan.—Regular visitation would not seem to be needed.

Mr. Justice Banerjee.—On the other hand occasional visits would be invidious.

Dr. Mackichan.—I do not remember any case in which such a visit has really been needed in this presidency. We have not the overgrown High Schools of Madras and Bengal. It would be useful for the principals to go round and see one another's colleges. That would help to keep things up to the mark. The Director visited us once. If inspection were required, the Vice-Chancellor might be sent.

President.—If this were done in Calcutta, the Vice-Chancellorship would become a very onerous post.

Mr. Justice Chandavarkar.—In Government colleges transfers are a defect. The Secretary of State selects a good man in England; he comes here, lectures for about six months and is then sent away as an Inspector. This occurred in the case of Messrs. Giles and Coventor.

Mr. Hewett.—It must be left to Government to decide where the men are to go. Inspectors must have had experience in teaching. In Bombay the difficulty arises from the fact that the Department is a very small one. It is not the case that teaching is sacrificed to administrative posts.

RESIDENTIAL QUARTERS.

Mr. Justice Chandavarkar.—These should be encouraged as far as possible to enable students and professors to come more in contact with each other.

Dr. Bourne.—Here they are only lodging houses; they ought to be under the closest supervision of the European staff.

Mr. Hewett.—The Elphinstone Hostels are not satisfactory.

Dr. Mackichan.—The land question is a great difficulty.

Mr. Hewett.—Students' quarters are a great need in the Grant Medical College. Mr. Giles told me that he is endeavouring to procure them. The Punjab spent a lakh to provide accommodation for students.

Dr. Mackichan.—The Bombay Trust Fund are asking very heavy prices for land.

Mr. Hewett.—They have to ask as much as they can get with a view to the repayment of their interest.

COLLEGE SOCIETIES.

Mr. Justice Banerjee.—The College University Institute is flourishing.

Dr. Mackichan.—A University Union with a Lecture and Reading Room is a thing much needed.

President.—It is an excellent thing ; what is wanted is some keen men to take interest in it. Professor Adams, who did not seem to take much interest in

Mr. Justice Chandavarkar.—Such men are procurable. I once spoke on the subject to it. The great object of such a Union is to bring together undergraduates, old students, teachers and professors.





सत्यमेव जयते

An abstract of the discussion of Allahabad evidence which took place on the 9th April 1902.

EFFICIENCY OF SCHOOLS.

Mr. Lewis.—The first very important matter is as regards the efficiency of our schools. That question is of the utmost importance to the University. We have heard that our schools are not as good now as they were 30 or 40 years ago and I can quite believe it. In considering what are the differences between the schools in those days and at the present time we find that there were fewer schools then than there are now and that it was easier to get a limited number of competent teachers. It is not now easy to find teachers for all the schools.

Syed Hossein Bilgrami.—Is it not the case that there are plenty of teachers but you cannot pay them?

Mr. Lewis.—Yes, that is true.

Syed Hossein Bilgrami.—25 or 30 years ago the pay of the lowest teacher was pretty high?

Mr. Lewis.—Yes, I think so. I also think that the schools were then more liberally treated than they are now.

Mr. Justice Banerjee.—Is it because the total amount of the educational grant has been reduced or because of the wider distribution of the same amount?

Mr. Lewis.—On account of the larger distribution; the original grant for schools has no doubt been increased, but school for school and teacher for teacher the grant is extremely low. In those days there were very few colleges; now we have college classes started in connection with many schools, with the result that high schools have transferred teaching power from the school to the college classes. That is the case in Government, aided, and, I think, missionary schools. In those days the Missionaries themselves looked after the schools; now they sometimes have only one Missionary engaged in school and all the others in college work. I think about 30 or 40 years ago there were as many as four European members of the staff attached to the school at Benares; now we have provision for one, and that too under conditions which make it difficult to secure the best stamp of man. Of the teachers who were at one time in Benares two—Messrs. Griffiths and Valentine—were men of considerable reputation and rose afterwards to a high position in the Department. School teaching has now fallen a little into neglect.

We have in many of our schools teachers paid as low as Rs. 10 a month. In the District Schools such teachers even teach English.

Mr. Justice Banerjee.—What are their qualifications; are they graduates?

Mr. Lewis.—I have a list here. In Mutra we have one man on Rs. 14 who has passed the Entrance and two men on Rs. 15 each, one of whom has passed the Entrance and the other the Middle English.

Mr. Justice Banerjee.—In the matter of these appointments do you give preference to a man who has passed the Entrance in the first Division over one who has passed in the second Division and to one who has passed in the second over one who has passed in the third?

Mr. Lewis.—Yes; we do take that into consideration. At Farrukhabad the seventh master has passed the Entrance and get Rs. 19, the eighth master gets Rs. 18. Anything under Rs. 20 is too low to secure the services of trained or competent teachers. In Mainpuri we have two English teachers drawing Rs. 15 each and two more drawing Rs. 20 each. At Etah we have a man who has passed the Entrance on Rs. 10, two men on Rs. 15 each and one man on Rs. 20. At Lalitpuri we have three English teachers, the head master gets Rs. 100, the second master Rs. 40, the third master Rs. 20 and the additional

teacher Rs. 20. At Hamirpur there are two teachers on Rs. 14 each and one on Rs. 10. There is no doubt that the pay of an English teacher should not be so low.

Mr. Justice Banerjee.—Are all these teachers trained?

Mr. Lewis.—No; we want them to be trained; with these payments we cannot get trained men, and therefore we have to put in others.

Mr. Justice Banerjee.—Do those men stick to the profession of a teacher or are they, what are sometimes called birds of passage, working as teachers for the time being while they look out for more profitable employment elsewhere?

Mr. Lewis.—They are the worst men who stay; the best get other things to do.

The right of teachers in vernacular schools to pension was withdrawn in 1885 and has not yet been restored. That has made the service unpopular. The above refers to the Municipal and District Board Schools and also to the old village schools which are still called Government Schools.

Mr. Justice Banerjee.—What is the minimum pay of a Vernacular teacher?

Mr. Lewis.—When I came to this province seven years ago there were very many teachers who only received Rs. 2 or Rs. 3 a month; it has steadily risen to Rs. 8 a month. In most districts the minimum of pay is Rs. 6 and we are going to raise it to Rs. 8.

In order to improve the teaching in schools we have ordered that in the case of new appointments in all schools—whether they are under public management, or whether they are aided or unaided—preference shall be given to the holders of the teachership certificate. The managers of the aided schools who will not comply with this order will render themselves liable to lose their grants, and similarly the managers of unaided schools will be deprived of the privilege of recognition of their schools by the University and the Department. Paragraph 10 of Circular No. 26 of 1897.

Syed Hossein Bilgrami.—Where are the trained teachers to come from; have you got normal schools?

Mr. Lewis.—We have got a Training College for English teachers, but it does not supply our wants. Most of the appointments are filled up by non-certificated teachers, because certificated teachers are not available.

Syed Hossein Bilgrami.—Then this order will remain a dead-letter?

Mr. Lewis.—No; every year trained men will get the first appointments.

We were considering the other day in the Syndicate what we should do in order to keep the schools up to the mark and to find some way of getting rid of our inefficient schools. You will find the proposal which I laid before that body on this subject on page 221 of Appendix B, Minutes of the 1st March 1902.

President.—Is there any provision for giving notice of withdrawal of recognition to the proprietor of a particular school before the recognition is actually withdrawn?

Mr. Lewis.—In the case of unaided schools there is practically a year's notice; that is to say, each such school has to apply to the Inspector every year for permission to send up candidates for the Entrance. The application is made in the beginning of the year, and if the Inspector is not satisfied with the management of the school, he refuses the recognition.

Mr. Justice Banerjee.—Does that lead to any inconvenience?

Mr. Lewis.—None whatever, because, unfortunately, if the school is not recognised, its students appear at the examination as private candidates.

President.—There may be good boys at a bad school. The withdrawal should be postponed to enable them to enter a good school.

Mr. Lewis.—This has been taken into consideration.

At present many of the candidates who appear at the examination as private candidates get their certificates signed by Head Masters who know nothing about them. The Head Masters ought to know something about the boys before certifying them. (Bye-law 40 of the Syndicate, page 222.)

Syed Hossein Bilgrami.—Would you like to have provisional certificates for teachers? Suppose a man does not hold a certificate, but has been teaching for some time and that the Inspector, being satisfied with his work, recommends that he should be given a provisional certificate until he gets an authorised one.

Mr. Lewis.—The scheme does not include a suggestion of that kind, but the placing of his name upon the Register of recognised teachers would be really equivalent to a certificate.

Our schools are in many respects in a bad way through having so many inefficient teachers. It is very important that we should get rid of them, as they are doing harm to the schools. In an office, if you have an incompetent clerk, the work is at a standstill and you must therefore send him away. This is not the case with teachers; the school goes on after a fashion, and it is against this pretence that we are making a stand. The appointment of a teachership should not be regarded merely as a way of getting a livelihood for a man who would be left without any means of subsistence if he were cut adrift from it. It is a much more serious matter, for the education of hundreds of boys is perverted by a bad teacher. The form of application for recognition includes a statement with regard to certain matters that have been mentioned by the Government of India. (Page 223.)

Nothing much can be done with regard to fees, nor are they a matter of great importance, if the school is efficient, that is to say, has a good staff of masters and sufficient accommodation and equipment. There may be endowments enabling schools to provide buildings and staff without charging substantial fees.

Mr. Justice Banerjee.—Is there any rule about the number of students that each class should contain?

Mr. Lewis.—No; it is left to us. The number would be limited by the size of the room if by nothing else.

INSTRUCTION OF TEACHERS.

There is no doubt that our teachers are not actuated by the right spirit with regard to teaching. When we started education there were few schools and the teachers were anxious to educate the boys, but now a majority of the teachers are only anxious to get their boys through the examinations. I went to a school the other day and put the following question to the Entrance boys: "give a descriptive definition of a chair which would not apply to any other kind of seat." It was a simple question, but the boys not being accustomed to answer questions which were outside their books not one of them could give a reply. I feel sure that if we were to state that at our next inspection or at our next University examination we would ask the boys to define objects with which they are familiar, the teachers would prepare careful definitions of all such things and the boys would learn them off. We want to get teachers out of this habit. For this purpose we must have more competent teachers and the Training College will help us in supplying them. Care must be taken that instruction in the Training College does not become mechanical.

Syed Hossein Bilgrami.—One Training College is not enough for the whole province?

Mr. Lewis.—No; but our Training College is, nevertheless, not full.

Syed Hossein Bilgrami.—It is not full because the pay is small?

Mr. Lewis.—No; I have myself been away from India for some two years and, I think, the College has suffered. If I had been here, it would have been full now. I am certain that it will be full next year. A rule requiring schools to appoint trained teachers, if they are available, will suffice to fill the school.

Even those teachers, who are employed in the absence of an efficient trained teacher, should be appointed as a temporary measure only and made to go to the Training College in the next Session.

Mr. Justice Banerjee.—There is a danger of depending too much on rules and too little on personal influence.

Mr. Lewis.—We must train the teachers to habits of independent and practical work. If that is pursued long enough it becomes a habit.

The larger the number of men of that kind whom we can secure the greater is the likelihood of our securing improved teaching.

Mr. Justice Banerjee.—Undoubtedly it will be a decided improvement upon the existing state of things.

Mr. Lewis.—I have made some arrangements which will, I hope, give us a supply of men who have taken degrees in Arabic and Sanskrit for teaching Oriental classes.

Syed Hossein Bilgrami.—Would it not do to make the Punjab Oriental degree a condition for employment? Every degree-holder is not so good as a Panjab Oriental scholar. The B.A.s do not know much Arabic; the M.A.s. no doubt are better.

Mr. Justice Banerjee.—What is the class of men who teach Sanskrit to the Entrance boys?

Mr. Lewis.—They are Pandits, but they cannot generally write a correct sentence in Sanskrit. You cannot expect a good classical education from these people. Throwing open appointments of this kind to educated men will tend to make Arabic and Sanskrit more popular in schools. If we place the teachers of these languages on the same level with the teachers of other subjects in the schools, then they will become more popular. The only thing we have to do is to let the appointments of the Pandits and Moulvies on Rs. 10, 12, or 15 be absorbed, as they fall vacant, in the general list of teachers in the schools. Any teacher in the school who is competent to teach Sanskrit, even if his pay is Rs. 80 or Rs. 200, should be allowed to take up that subject and we should get rid of the Pandits and Moulvies.

Mr. Justice Banerjee.—What is the pay of an Entrance class Pandit?

Mr. Lewis.—We have one appointment of Rs. 50 at Allahabad, 3 of Rs. 40, 4 of Rs. 30 and the rest are smaller appointments. At Muttra we have two Pandits on Rs. 25 and 15 respectively. At Farrukhabad one Pandit gets Rs. 20.

Mr. Justice Banerjee.—The pay ranges between Rs. 15 to Rs. 50?

Mr. Lewis.—Yes. At Lalitpuri there are two Pandits who receive Rs. 15 and Rs. 10 respectively.

CRAMMING.

It seems to me that it is easy to make it impossible for the students to cram up in some of the subjects for the Entrance Examination if only we are prepared to go far enough. If you avoid questions set from books which can be answered from keys or from the notes of the lecturers, and if you have more translation from English into vernacular and from vernacular into English, it will do away with the usefulness of cramming.

President.—Would you propose to have one paper in English with an unseen passage and another for composition and also to have a rule that the candidates must not only get enough aggregate marks, but must also pass in each paper?

Mr. Lewis.—Yes. The examination in the prescribed text-books might be improved. There are too many questions set of the kind to which so much objection is raised. Questions regarding curious difficulties in language, allusion, etc.

Dr. Bourne.—Do you always get the best men to examine the Entrance Class?

Mr. Lewis.—It is rather looked upon as elementary work, but we have got fairly good men who are glad to take appointments of that kind.

Dr. Bourne.—The giving of less marks for setting the Entrance than the higher papers gives the idea that it is an easier task, whereas in fact it is the most difficult and important part of the examiners' work.

Mr. Lewis.—The Entrance examiner makes a good deal on account of the large number of papers that he has to examine.

UNIVERSITY REFORM.

We have listened to a very serious indictment of our University work, *viz.*, that the work done up to the Bachelor's Degree is mere school boy's work, and is unworthy of the recognition of a Degree. I think that this is due to the fact that we have only one standard for entering the University, whereas in the English University you have men coming up who have read far beyond the Entrance stage. This way of looking at things is strange to the students in India and to many gentlemen of the country who have not seen what is done elsewhere.

There was an agitation when the 16 years' limit was fixed for the Entrance on account of clever boys, who when 12 years of age are fit to pass the Entrance and who, it is said, would have nothing to do until they reached the age of 16. But it would be a great advantage to them if, instead of joining the college at the earlier age, they stayed longer at school and qualified themselves better for college work.

Mr. Justice Banerjee.—They would require better schools ?

Mr. Lewis.—Yes ; if we accustom ourselves to require our boys to aim at something higher instead of striving merely to get through the Entrance, we shall see something different in our results.

I think that the proposal to concentrate all the M.A. classes in one centre is extremely sound from the educational point of view, as it will avoid a good deal of waste of money. Now the energy of colleges is frittered away by the increasing number of small classes which occupy the best available teachers and would be better amalgamated into one class.

[*Mr. Lewis* then presented to the Commission a copy of *Mr. Boutflower's* circular of the 1st August 1901 requiring Government officers on the Syndicate to attend a meeting to be held on the 3rd of that month in order to vote for the transfer of a year from the college to the school course.]

Mr. Lewis.—The meeting was not actually held ; it was postponed and held afterwards on the 4th November. I have given to the Commission copies of the proceedings of that meeting.

Syed Hossein Bilgrami.—The motion was withdrawn ?

Mr. Lewis.—Yes.

Dr. Bourne.—The question arises about the great difference in size between the Syndicates of Madras and Allahabad.

Mr. Lewis.—The large size of the Allahabad Syndicate is due to its being representative.

Dr. Bourne.—Is representation desirable ?

Mr. Lewis.—I think our Syndicate consists with a few exceptions of useful members. There are two Secretaries to the Government in the Public Works Department, who are practically of no use. I have seen one Secretary to Government present at a single meeting only.

Dr. Bourne.—They may be all useful men. The question is are all these elements required ?

President.—The point may be put thus. The Senate should be representative ; the Syndicate not representative but effective.

Mr. Lewis.—It is not universal representation, but merely representation of Faculties and of men who are engaged in educational work. Possibly some of the aided Colleges might have something to say from their point of view. We sometimes have a certain amount of opposition which is reasonable and worth having. Sometimes we have views put before us which would not be thought of but for their being presented by outsiders.

Mr. Justice Banerjee.—Are particular College views put forward, for instance, Canning or Lucknow or Queen's College views ?

Mr. Lewis.—I think not.

I have already expressed my opinion that the M.A. classes may be concentrated and from that point of view I think that Allahabad would be a suitable centre for most of the subjects ; Sanskrit in its higher branches should be taught at Benares in the Sanskrit and Queen's Colleges.

Syed Hossein Bilgrami.—Arabic should be taught in Lucknow?

Mr. Lewis.—Yes.

In Government Colleges for the first and second year in the Intermediate class the fee is Rs. 8 a month. For the third and fourth year in the B.A. class it is Rs. 10 a month and for the fifth year in the M.A. class it is Rs. 12. Then we have a rule that Government or aided Colleges may admit students at half rate on the score of poverty up to 5 per cent. of the total number of students in the College.

President.—Do you think these rules are evaded to any extent?

Mr. Lewis.—I think not; some three or four years ago it was represented to Sir Antony MacDonnell that three-quarters of the Government fees were too high for the Canning College in the opinion of some important persons in Oudh and he allowed them to charge Oudh students Re. 1 less than the rate in aided Colleges.

Mr. Justice Banerjee.—Why are your rules so strict about the fees in the aided Colleges? In Bengal they are not so strict. Do you know of any reason why these rules have been made?

Mr. Lewis.—In 1894-95 the Government considered the question of fees and passed certain orders, their object being to carry into practice the policy announced by the Government of India that higher education should be more self-supporting. There was also an order that the aided Colleges should not be compelled to charge fees as high as those charged in the Government institution. These conditions are met by the rules. We have similar rules in connection with the Schools. After these rules were passed there was a considerable outcry on the part of the aided Colleges and Schools, but they now feel that the rules are proper. The unaided Colleges, before the rules were passed, charged small nominal fees, but since these rules came into force they have been able to charge more reasonable fees and have thus been making a good income which enables them to improve their Colleges. The Aligarh College also protested against the raising of fees, but now they like it.

President.—The Central Hindu College at Benares is unaided?

Mr. Lewis.—Yes.

President.—It only charges Rs. 2?

Mr. Lewis.—Yes; it was not in existence at that time. No doubt the increased rate of fees had something to do with the creation of that and other colleges and schools.

President.—The Central Hindu College is underselling the Queen's College. Do you think it is possible to do anything in a case of that kind by fixing a minimum fee rule?

Mr. Lewis.—I do not think we can fix the minimum fee very well, but I think that you might have a rule which would penalise any infringement of the inter-school or college rules.

INSTRUCTION OF BENGALI BOYS.

Mr. Justice Banerjee.—To what extent is Bengali the medium of imparting instruction to the Bengali boys in this province?

Mr. Lewis.—There is a school established here, called the Allahabad Bengali School, which is intended for Bengali boys alone. Nine boys from it passed the Entrance in 1901. There is a Bengali High School in Benares which does very well. The teaching of Hindi in the lower classes is compulsory under orders passed by Sir A. P. MacDonnell. It is in conflict with the general principle that teaching in the lower stages should be in the vernacular of the student. The Bengali language will be recognised in the new School Final Certificate Examination and I think also in the new Matriculation.

With a letter, dated the 28th April 1902, Mr. Lewis forwarded the following note to supplement his oral statement.

1. The first consideration in taking account of University Education in this country is the material supplied by the schools to the colleges. This is generally pronounced faulty. For this the school teaching or the examinations, or both, must bear the blame.

We are told that our schools did better work 40 years ago, and in some respects they did. What then differentiates existing schools from the old ones?

In the first place, there were few schools then; now there are many. The extension of education has been in some measure by a diffusion of knowledge rather than by a propagation of learning, by a wider spreading out rather than by a wider growth. There may be good teachers enough for a certain number of schools; if the schools are too many, poorer teachers must be employed and education suffers. This has been one consequence of the rapid expansion of education—we haven't enough teachers for the schools; and such education as is given, instead of being a physic for ignorance, is an aggravation of the disease. Hence many of our schools, so-called state schools among others, should be at once condemned, those only being permitted to continue which are good, or capable of reform. For the rest the best remedy is the pruning knife.

Again at that time there were scarcely any colleges, and the most capable teachers were available for school work. Now owing to the multiplication of local colleges much of the best talent is drawn to them, and graduates are apt to look upon school teaching as somewhat degrading. So before Mission Schools started their college classes, the Missionaries were able to give to the schools their undivided services, now transferred wholly or mainly to college work. A similar change may be noted in state schools. Some 40 years ago there were four Englishmen, scholars and men of high ability, on the staff of the Benares Collegiate school, where we now have provision for only one, and that under conditions of service which must exclude the best men, such men as were once employed there.

This development has been accompanied by a reduction in the pay of some of the higher school appointments.

Then again the Government of India has ordered a bifurcation or trifurcation of studies in high schools, with an option of various courses in each branch; and it has at the same time equally strongly insisted on the necessity of not increasing the expenditure on secondary school education. The result of this has been that the pay of teacherships has been kept down, so as to be too low to attract the best men.

There are orders of the Local Government requiring the appointment of trained teachers in all Government and Aided Schools in preference to men not so qualified. Yet even in State schools there are many posts far too poorly paid for junior certificated teachers' appointments, for instance, of Rs. 10, 12 and 15 per mensem.

Then again by the orders of Government passed in 1885 schoolmasters thereafter employed in State schools were not given any pension rights.

All these facts have had a share in spoiling the work of the schools.

2. We have done something to counteract these baneful influences. We have not been in a position to remove them. Perhaps we shall now have an opportunity.

The pay of appointments needs to be liberally revised from the highest to the lowest grades; a movement has been made towards this end. Generally speaking, an Englishman is desirable in every school; and this one change alone would do much to familiarise school boys with speaking English, and to fit them for following College lectures. These are changes that cannot be carried out without specific orders.

We have established a Training College for English teachers in Secondary Schools, and given trained men a prior claim to all appointments whether in State or aided schools. A junior certificated teacher can command a minimum of Rs. 20 per mensem to begin with, a trained graduate can command at least Rs. 40; and if they turn out to be good practical teachers, their promotion is fairly rapid. These facts when generally known will incline men to enter the

Educational Department by way of the Training College, and make that institution popular. And the result in the schools will be that more attention will be paid to approved methods of teaching, and less to mere priming for examinations. Teachers and pupils alike are too apt now to accept that division of labour which apportions to teachers the thinking out of answers to possible questions, and to boys the committing of the same to memory. If it were known that boys would be called upon to exercise their observation and discernment by giving descriptive definitions of common objects, it is almost certain that it would come to their learning carefully prepared definitions dictated to them by their teachers and their own faculties would not be drawn out or exercised by such a requirement. Their own power of thought can only be tested by asking questions which they never expect to be asked, and for which they cannot prepare by learning off answers provided by some one else.

Steps are being taken with the co-operation of the University to put beyond the pale all schools that do not employ qualified teachers, and that are for this or other reasons unfit to share in the work of education.

3. Then there is the part which examinations play in the present unsatisfactory results of education. To some extent

Improvement of Examinations.

all examinations, except those that are too high for any University to employ at all stages, must afford a chance to the man who crams for them. But it is not impossible, as some seem to think, to make cramming altogether useless for examinations. For instance, if in languages only unseen passages are given for translation and for grammatical questions, and if in mathematics there are no book-work questions but only new exercises and problems, it is obvious that the examination would be of a very high character and that cramming would be of no avail for it. But it is not even desirable to go quite as far as this, for it is necessary to encourage the careful study of the book-work in mathematics, and this would not be done if it were not allowed to count for anything in an examination. But something might unquestionably be done to discount mere cramming by reforming the language and mathematical papers in the direction here indicated. Some subjects afford more restricted facilities for reform in this way, but, notwithstanding this, they must be accepted as serving a valuable purpose in education.

4. As for the actual work of the Colleges themselves it is good, and indeed

Too many Colleges.

sometimes excellent in the larger institutions, taking into account the quality of the material with which they have to deal. There are, however, too many colleges in the United Provinces, some of them being small, badly off for funds and therefore badly equipped for the work they undertake. Moreover, these small colleges are ambitious to provide a variety of alternative courses of reading for the option of their students, thus still further embarrassing themselves; and even when they have the means to provide the necessary teaching for one group of subjects, sufficient for the degree examination, and to do that well, they spoil things by attempting more and engaging, as a necessary consequence, a larger staff on lower pay and possessing inferior qualifications. If the funds and teaching power of some of these colleges were spent on the schools to which they are attached, the schools would be better, and the students in the College classes would be able to go elsewhere to properly equipped colleges.

The above appear to me to be matters of vital importance affecting the soundness of higher English education in connexion with the University of Allahabad.

5. I am satisfied with the constitution of the Syndicate as defined in the Act, section 13, and as practically in operation.

The Syndicate and Senate.

I should not, however, be averse to some restriction on the appointment of persons for distinguished services unconnected with education to Fellowships of the Senate.

6. If the electoral body consisted of graduates of the Universities rather

Electoral body.

than of the Senators, and if they were to elect only from themselves, the result would be the filling of the Senates with graduates undistinguished for any sort of scholarship and unqualified to influence academic studies. The common complaint against our Universities is that they produce graduates but not scholars, and these unscholarly graduates being almost the only available representatives

of the electoral body, of which they would indeed be truly representatives, would be the Fellows of future Senates; and the standard of learning would inevitably be lowered, if slowly yet surely. At present in the Allahabad University a scholar of high attainments engaged in Educational work in the United Provinces has not to wait long before he is invited to the council table of the University.

7. It is obvious that economy of teaching power would be gained if small

Centralisation of higher work.

M.A. classes in any subject, scattered about in a number of distinct colleges, and yet not too large to be managed as one class, were amalgamated at a central institution. It has been objected that the Professors in the smaller colleges which are affiliated to the M.A. standard take a special interest in this advanced work, and find in it some compensation for the drudgery and other unwelcome conditions of the B.A. work; and that this compensation is necessary in order to make it worth their while to serve as Professors at all. There is something in this, but unless the staff is sufficiently large to make ample provision for both the higher and the lower work in these colleges—which is not always the case—it must mean that the work in the B.A. classes suffers by the arrangement. But, as I have tried to show, the evils of which the Government complains are largely due to the unwise ambition or mere vanity which aims at higher things without making sure of the lower, upon which success in the more advanced stages must be altogether dependent.

I am therefore in favour of more concentration of the highest instruction, and of a further limitation in the number of colleges affiliated to the M.A. standard. I am not in favour of all the highest studies being pursued in Allahabad alone, for the special circumstances of Benares mark it out as the rightful seat of the most complete Sanskrit learning. And the plan of having separate hostels for each of the affiliated colleges does not commend itself to me for the reason that the numbers at present likely to attend from those colleges are far too small to need or justify the establishment of hostels for each. Provided the students are assembled at one centre under competent lecturers, it is educationally unimportant whether those lecturers are attached to a College like the Muir Central College, or more directly associated with the University. Such details of their appointment would not affect the nature of their duties or the efficiency of their work.

8. In order not to interfere with the educational operations and discipline

Spheres of influence.

in other Provinces, the University of Allahabad has strictly defined its own sphere of influence by excluding from its Entrance Examination all those who are neither residents of, nor attending a school in, the United Provinces, the Central Provinces, Rajputana or Central India. This it has done in spite of the fact that it has thereby incurred a loss of income from fees which has put it to the gravest inconvenience. Neighbouring Universities have not been equally self-denying. This year, for instance, 436 candidates appeared from the United Provinces alone, with probably others from the Central Provinces, Central India or Rajputana, at the Entrance Examination of the Punjab University; while the whole number left to appear at the Allahabad Entrance was 1,539. The loss of fee income to the local University is obvious. This transfer of favour to another University is not due to the higher character of its examinations; nor is it due, as statistics prove, to the adoption of an age-limit by the Allahabad University. But the possibility of such a movement as this makes it impossible for the University of the United Provinces to influence beneficially higher education within its own territorial range. The stricter its requirements, the more students will it lose. It is therefore most desirable that the spheres of influence of the various Universities should be as far as possible exactly defined. They will then be able to go forward in accordance with their own aims and ideas, undeterred by any unworthy competition for the favour and fees of the weakest students.

The opinions here expressed have reference to the state of things in the United Provinces and in neighbouring parts of India coming within the sphere of operations of the Allahabad University.



सत्यमेव जयते

DISCUSSION WITH MR. W. BELL, DIRECTOR OF PUBLIC INSTRUCTION,
PUNJAB, AND LOCAL COMMISSIONER, HELD AT LAHORE ON THE
12TH APRIL 1902.

The University and the Education Department.

Syed Hossein Bilgrami.—What is the relation between the University and Secondary Education.

Mr. Bell.—The University is said to be a consultative body. It ought to have the same relation to secondary education as in other Provinces. The prime object of some of the promoters of the University was to minimise the importance of the Education Department and to direct education into indigenous channels. Dr. Leitner contended that no Education Department was required. He said that the Province was dotted all over with indigenous schools and that all that was required was to direct them. The Oriental College was to be the coping stone of this indigenous system. Largely at his instance the statute was passed that the Government should do nothing without consulting the University. He wanted to keep a grip on the action of the Government. Colonel Holroyd, who was Director of Public Instruction, had great difficulty in struggling against Dr. Leitner's desire to orientalise all primary education. As an illustration of the way in which the University worked, I may mention that when the Director of Public Instruction suggested a Training College for Teachers, the Government ordered the matter to go before the University. The University advised that the College was not needed, and that to provide Anglo-Vernacular teachers would revive indigenous education.

Syed Hossein Bilgrami.—We find in Hyderabad that in most villages there are indigenous schools teaching mental arithmetic and writing by their own methods; when we establish modern schools people object to send their children to them, and want to continue in the old way. What is your experience here?

Mr. Bell.—Just the reverse. The Government Schools kill the indigenous schools in spite of our endeavour to foster them. A second result of the oriental agitation is a liberal system of grants-in-aid to indigenous schools. An inefficient teacher can earn a liberal grant if he teaches by the old methods, but if he passes the middle school examination and is put on the ordinary list he gets a much smaller grant. All we require from indigenous schools is an attendance register. The only true indigenous schools are those who do not ask for help. As soon as they take the grant they become bad primary schools.

Mr. Justice Banerjee.—Is there such great multiplicity of subjects in the primary course as one witness said?

Mr. Bell.—In the lower primary there are few subjects. In the upper primary there are three languages: English, Urdu and Persian. The compulsory Persian is a mistake. At the lower primary stage the pupils are 8 or 9 years old, at the upper primary 10 or 11. In the lower primary they study their own district and the outlines of the Province, and the first four rules of arithmetic. The geography of the district is not studied minutely. The boys must draw the outline of the district, and know the tehsils, the chief towns, rivers, etc. There is a distinct geography for every district; it is, I think, too minute. If we had none but trained teachers it would not be necessary to put the book into the children's hands. In the upper primary we should have struck out Persian but for the feeling of the Muhammadans. Whenever its abolition has been suggested there has been an appeal to the Lieutenant-Governor. The subjects in the upper primary are Arithmetic, Geography, English, Urdu, and Persian. The children finish Arithmetic in this course. It has been practically decided to drop Persian, public opinion is not now so strongly opposed to this course. The Arithmetic could be cut down. We are going to reduce the subjects and have more object lessons and conversation. I should not object to a system of primary schools with no English, leaving boys to begin English in the secondary schools. The Anglo-Vernacular primary schools are merely primary departments of the Anglo-Vernacular schools.

Mr. Justice Banerjee.—Must students pass the upper primary or the middle school examination?

Mr. Bell.—For the University candidates are not required to pass any examination before the Entrance. But the school regulations require them to pass an examination for promotion from the upper primary to the middle and from the middle to the high school. I should like to abolish the middle school examination. Many of the complaints about the methods of teaching arise from the middle school examination, because endeavour is made to constitute a complete course in order that the examination may serve for entrance into the public service. As much as possible is crowded into it. The high school course is largely a repetition in English of the middle school course. In this way we are prevented from having a well arranged system. Boys must pass 5 years in a primary and 5 in a secondary school, with an examination at the end of each part of the course.

Mr. Justice Banerjee.—Ten years is too long; it makes the least possible age for the Entrance 16, and it may thus prevent some students from going home with scholarships and passing into the Indian Civil Service.

Mr. Bell.—I would not mind cutting down the high school course to 4 years. Some good schools have that arrangement.

Mr. Justice Banerjee.—Why not make it 4 years primary and 5 years high school?

Mr. Bell.—An infant standard is included in the first 5 years.

Mr. Pedler.—In Bengal we have the infant standard *plus* 6 years middle school *plus* 4 years English.

Mr. Justice Banerjee.—The 4 years has been considered insufficient.

Mr. Pedler.—Then you might teach English for 3 years in the vernacular course.

Mr. Justice Banerjee.—The difficulty lies in trying to make the vernacular course complete in itself when, as a matter of fact, it ends in the middle of school life.

Mr. Bell.—The primary education is complete for the mass of boys and therefore I say it should not be less than 5 years.

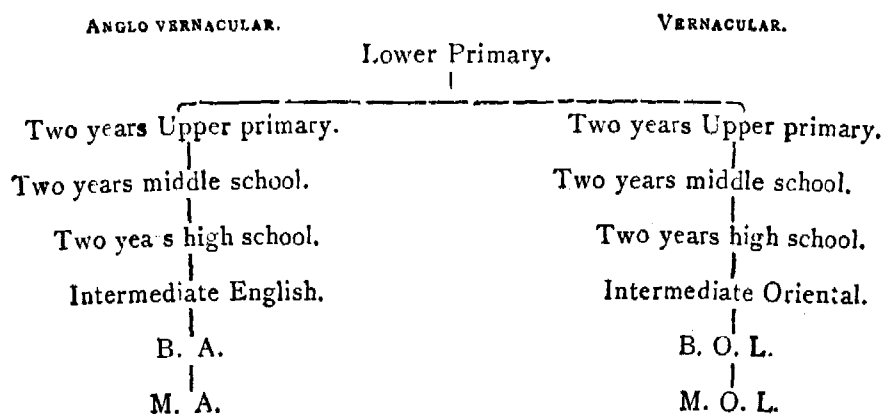
Mr. Justice Banerjee.—The two sorts of schools should be separate altogether. I would have no Anglo-vernacular primary schools. Then the ordinary boy would get the whole of his education in a primary school.

Mr. Bell.—I agree to that.

Dr. Mackichan.—I think that there should be a complete vernacular education for all classes of students.

Mr. Justice Banerjee.—I do not agree. It entails much waste of time and energy. The argument that those who take the complete vernacular course afterwards do well in English loses force when it is remembered that only the best of the vernacular scholars afterwards take up English.

Mr. Bell.—In the Punjab there are two complete courses. Anglo-vernacular and vernacular running in parallel stage:—



We have failed to bring the two into touch by making one a simple reduplication of the other. A B. O. L. is merely a B. A. who does not know English and has studied his subjects badly. He cannot be efficient in them. Take for instance the case of psychology, there is only a primer of the subject available. Dr. Leitner wished to have a series of translations always in progress. He showed Lord Ripon rolls of manuscript as books in course of preparation. They never went beyond the initial stage. They have not been published and are never likely to be, because the University has not got the money. This year owing to outside pressure a small grant of Rs. 500 was given.

Syed Hossain Bilgrami.—Would you abolish the B.O.L.?

Mr. Bell.—Instead of having B.O.L.'s I would have B. A.s who have paid special attention to classical languages. We should get better men who would know English and make use of their subjects. The B. O. L. can never assist in developing his subject because he does not know English.

Mr. Justice Banerjee.—It would be better if they were required to learn English, whilst studying their subjects in their own vernaculars.

Mr. Bell.—A B.O.L. who takes philosophy knows nothing about eastern philosophy, but has a smattering of western philosophy. Therefore the title B.O.L. is a misnomer, and the University has utterly failed to carry out its original intention.

The Vice-Chancellor spoke about the representation of the University at the Educational Conference and in the Text-Book Committees. I should like to say that until 1900 half the members of that Committee were appointed by Government and half by the University; but according to orders of the Government of India passed in that year the University lost this privilege. The Punjab Government requested the Government of India to allow the old practice to be continued, but the latter declined and added that members of the University might be nominated by the Local Government. However, the Text-Book Committee at present consists of 21 members, out of whom 12 are Fellows, so that I don't think there is any ground for complaint. With a small membership it is necessary to provide for all subjects and that is difficult with two appointing authorities. Similarly as regards the Educational Conference. There were 40 members at the last Conference and 17 of them were Fellows of the University. Every kind of College was represented. The Assistant Registrar of the University was also a member. In the work of the Department the University though its Fellows is amply represented, although the Senate was not asked to send a delegate to the Conference. The present system gives the best representatives because the Government has the whole province to choose from, whereas the University can only choose from amongst its Fellows. As a matter of fact, the choice in the olden days was rather haphazard.

President—The object in such a case is not representation but competence, and if the Government chooses carefully it can secure greater efficiency than the Senate which may be moved by special reasons.

Mr. Pedler.—There have been complaints of Government party spirit, but there has been no such spirit.

Mr. Bell.—For Sikh books we must have Sikh members, for Persian books Muhammadans, and so on.

Syed Hossain Bilgrami.—What are the functions of the Text-Book Committee here?

Mr. Bell.—They have to approve of all the text-books to be introduced in the schools.

Syed Hossain Bilgrami.—It does not follow that all the books they approve of are introduced?

Mr. Bell.—No, it rests with the Department to determine if the books are actually required. They do a great deal in the way of the preparation of books. Rs. 12,000 are set apart every year for the purpose of the preparation of books on general literature, so that the Text-Book Committee really does what the Oriental College hoped to do.

Mr. Justice Banerjee.—Does the University contribute any thing towards the fund for the preparation of text-books ?

Mr. Bell.—No. It has nothing to do with the preparation of text-books. We have our own contract with the printer and publisher. We get copyright from him. That gives money which we devote to the preparation of new books.

Dr. Mackichan.—Does that come to Rs. 12,000 a year ?

Mr. Bell.—Yes.

Mr. Justice Banerjee.—It is unfortunate that the impression has got abroad that certain books supposed to encourage disloyalty have got into the curriculum. That suspicion on the part of the Government is regarded as unfounded.

Mr. Bell.—Every Educational Conference is followed by a Government Resolution the main points of which are referred to the University, so that in most cases the Statute has been heeded. I admit, however, that this is not the case in the matter of primary education.

An argument for a school final is that it will enable the Education Department to control the high school courses. The only examination at the end of the high school course is the Entrance. For that examination the text-books are laid down by the University and consequently to a great extent the government of our high school is in the hands of the University. I should prefer that if there is a high school final, its curriculum and text-books should be entirely in the hands of the Department.

Mr. Pedler.—The University here conducts the Middle School examination. Who prescribes the text-books ?

The Middle School examination.

Mr. Bell.—The University : that shows again the extent to which we have consulted the University. The examination was handed over to the University in 1885, and as the University was then starving, we paid it, on account of that examination, a grant of Rs. 5,000 for establishment which has now been reduced by Government to Rs. 3,000. The Government of India at that time suggested that the grant of Rs. 5,000 should be paid to the University, as it was bankrupt. The Middle School examination brought in last year Rs. 38,000 to the University and cost only Rs. 26,000, so that the University has made a clear profit of Rs. 12,000. I may point out that, although this examination is nominally managed by the University, the burden wholly falls on me. The Registrar looks to me to make the necessary arrangements. The examination requires 8 teachers for this centre and 16 for other centres, and I have to provide the teachers for the purpose.

Mr. Pedler.—Who prescribes the books ?

Mr. Bell.—The object originally was that the University should simply conduct the examination, while the Department was to prescribe the text-books, but that has been lost sight of and every change in the curriculum has been referred to the University. I have however stopped the practice. Only last year a proposal was being referred to the University regarding a change in the text-books, but I stopped it. I refused to refer the matter to the University. If the University prescribe text-books for the Middle School examination, I do not see where the Education Department comes in so far as secondary schools are concerned.

Dr. Mackichan.—When did you make the change ?

Mr. Bell.—Last year.

Dr. Mackichan.—You refused to refer the proposal to the University ?

Mr. Bell.—I simply issued my own circular and there was no trouble. I sent a copy of it to the Registrar for information and he inserted it in his Calendar.

The whole case shows that there has been no attempt on the part of the Government to unduly shut the University out of school work. It is a great anomaly for the University to conduct school examinations. It occupies the time of the Registrar and his staff for three months. But under present circumstances withdrawal would mean ruin to the University. That shows how serious

the financial position of the University is, and how serious is the question of the maintenance of the Oriental College. The University just keeps solvent through its school work.

Dr. Mackichan.—It is surprising to me that your University should be solvent in the face of the fact that, being so small, it has to expend about Rs. 30,000 a year.

Mr. Bell.—There are endowments, the Oriental College is one of the purposes for which the endowments were given.

The University spends over a lakh and-a-half a year of which about a lakh is for teaching institutions; the balance is spent on examinations and the general objects of the University.

Dr. Mackichan.—The remuneration paid to the examiners is rather small.

Mr. Bell.—When the University was in serious difficulty in 1885, fortunately for them the Middle School examination was handed over to them. They had themselves already taken steps to economise, and one of the economies was to reduce the number of scholarships on the Arts side. No attempt has yet been made to restore them to the former figure. The remuneration paid to the Arts examiners was also reduced and though it has been slowly raised, it is still very small. From Rs. 100 it was cut down to Rs. 80.

Additional help was given by Government by handing over the professors of oriental languages to the Oriental College.

Mr. Pedler.—Does the Government pay their salaries?

Mr. Bell.—The amount of their salaries is added to the grant paid to the Oriental College. That was done at the time the transfer was made.

Syed Hossein Bilgrami.—Under whose control are the teachers in the Oriental College?

Mr. Bell.—They are under the control of the Principal of the Oriental College.

The services of the professors are also utilised in the Government College and, owing to the circumstances of the transfer having been lost sight of, the Government pays the University Rs. 2,000 for their use. Not only does the Oriental College take our hard cash but it cramps us in the matter of scholarships and fees. It prevents the development of work on the Arts side. The valuable work of the college is on the titles side; the degree side is not of much use. It is on the title side that our teachers are trained for the High Schools. I would welcome any scheme by which the Training College could co-operate. The School Department, as the Vice-Chancellor said, might be done away with. It is an anomaly. The only Government high school is that affiliated to the Training School. The Punjab teaching in the School Department of the Oriental College would be gradually taken over by the *Khalsa* Schools at Amritsar, Gujranwalla and elsewhere. I should like to see the Professorships restored to the Government College. The Oriental College began in a more ambitious way than its present work shows. There were Engineering and Medical Classes. The latter were subsequently transferred to the Medical College. The Principal of that institution objected to the transfer on the ground that it would give rise to the impression that the students were taking advantage of the facilities provided by the Medical College which in fact they were not, for they had no practical teaching or demonstration of any kind. The Ayurvedic class was, therefore, handed over to the Dayanand Anglo-Vedic College and the Yunani class to the Islamia College. They receive small grants of Rs. 30 a month for these classes. In the Yunani class there are 20 and in the Ayurvedic class 18 pupils.

I should like the B.O.L. class to be connected with the Arts side in the Government College. Let them read for the B.A. and take certain lectures in the Oriental College.

Mr. Justice Banerjee.—Then they would have to study other subjects through the medium of English; now they are studying them through the medium of vernaculars.

Dr. Mackichan.—Or rather not studying them.

Mr. Bell.—The Principal of the Oriental College is a Sanskritist ; he was brought here for that special work ; but as he knows no vernacular, his time, it seems to me, is wasted in the Oriental College. I should consider that a European Sanskrit scholar of Dr. Stratton's reputation should be in the Government College. I should like to see him Professor of Sanskrit in the Government College. His work is absolutely wasted in the Oriental College except for general supervision. He only teaches the M. A. class there.

Dr. Mackichan.—You would not make him a University Professor ?

Mr. Bell.—Yes, if a Teaching University is established.

Mr. Justice Banerjee.—Cannot the Oriental College be said to serve the purpose of causing western science to be taught through the medium of the vernaculars of the province ?

Mr. Bell.—Yes.

Mr. Justice Banerjee.—If that purpose can be served, I think it will be an experiment worth trying, although up to now it has not made very good progress.

Mr. Bell.—It is a mistake to spend all the money on the present 50 or 60 classes ; if you do that, then you will never have money to devote to literature.

Mr. Justice Banerjee.—If the School Department is abolished, would not that effect a saving ?

Mr. Bell.—Yes.

Mr. Justice Banerjee.—What is the amount of the fees ?

Mr. Bell.—Rs. 3,000.

Dr. Mackichan.—Has the whole subject not been worked from the wrong end ; are the intermediate stages provided for and are their books, etc., up to college work ?

Mr. Bell.—The College has been left hanging in the air, because the vernacular high schools have died out. The scheme for vernacular high schools has been struck out of the Code. At one time the University subsidised such schools, but it could not afford to continue the aid. A vernacular Entrance examination is prescribed but only the Oriental College School Department sends up candidates for it.

The Oriental University has failed in its object both in creating good oriental scholars and in producing oriental literature. The funds can be utilised in some better way.

Mr. Justice Banerjee.—It would be a breach of one of the conditions for which the money was given if the greater portion of it were spent in other directions. The principal object is to develop vernacular education in the University. The College may in the end lead to good results.

Dr. Mackichan.—Apparently it has not as yet.

Mr. Justice Banerjee.—For how long has the experiment been tried ?

Mr. Bell.—Twenty years.

I am referring especially to vernacular education in the Oriental College. I would not object to the School Department if it will provide sound vernacular school education.

Mr. Justice Banerjee.—You started with one difficulty. Unfortunately the experiment which is being tried in this province has two or three competing vernaculars to deal with.

Mr. Bell.—Yes, if the experiment had been tried with only one vernacular, the result might have been more satisfactory. There is one other point. Primary education has suffered in this province from the fact that it was decided

to make Urdu the vernacular of the schools. As we have persisted in this we have now succeeded in making Urdu to a great extent the vernacular all over the province; but there is no doubt that it has hampered the progress of primary education, because Punjabi students have to study in Urdu. We have provided simple elementary text-books in Urdu and yet the names in them are unknown to the children.

Mr. Justice Banerjee.—Was that witness right who said that the vernacular of a majority of the people of this province is Punjabi?

Mr. Bell.—Yes, but there is a vernacular proverb which says that Punjabi changes every 10 miles.

Gurmukhi is practically a dead language, but we have now a literary Punjabi. If we had begun with Punjabi in the schools we should have had a fair literature by this time. It is now proposed to give villagers the option of Punjabi in village schools—up to the upper primary, not further. In the first instance the decision will rest with the Deputy Commissioner. A general change from Urdu to Punjabi is out of the range of practical politics; but we shall be able in time to produce a series of good works in Punjabi.

The Text-Book Committee devotes a part of its funds every year to the translation of works of a literary character. The work of translation and printing takes a long time and we should have to be very active to make up for lost time.

A number of witnesses have said that there is no recognition of schools. The Department has just issued rules under which no school will send up candidates to the middle school examination unless it is on my list. For the Entrance examination schools may be recognized either through me or on direct application to the University on the report of a Committee. Hitherto the University has simply accepted my list, but until recently the departmental requirement has been only that the school should have been in existence for more than six months. Now qualifications with regard to buildings, appliances, etc., are required and the University has power to act separately in the case of an appeal from my decision. The Inspectors have in the past had to report for recognition schools which they said were not fit to be recognised.

The new regulations do not say anything about fees. I object to a minimum fee because one cannot prevent evasion. In the Punjab there is a minimum for aided institutions and that is quite right. There can be no underselling when colleges receive aid from Government funds. The Director of Public Instruction, Madras, asked me why there was no evasion on the part of these schools, and I replied that they are among the best of our schools and that the management is a guarantee. As time goes on difficulties may arise. We go into the accounts thoroughly and are satisfied. We had a case of evasion in the Lahore school and struck it off the list. I do not, however, think that a minimum fee should be required in the case of unaided institutions.

I want to have a school final in order to get the examination into my own hands. There should be a uniform examination for the whole province to be held at different centres.

Syed Hossein Bilgrami.—What arrangements should there be for Matriculation.

Mr. Bell.—My idea is that in the University Entrance there should be a test in English purely or very largely oral. I would not have another formal written examination. No notice should be taken by Government of the Entrance examination as a test for their service. I would revise the whole course for the secondary schools which is now disorganised by the middle school examination, and should be prepared to reduce it to four years. I would have the same four subjects as at present: namely, English, second language, mathematics, history

and geography. There is a bifurcation of studies in the high school into ordinary arts, science and commercial. It would depend on the funds of the school what courses they could provide. In the Amritsar school there is a commercial side, in the Central Model School a science side, and so on.

I should like to suggest that the Entrance test should mainly be in English, and that, if the number of candidates is not too large, the test should be mainly oral. The original rule in this University was that there should be oral tests in all language examinations. At present in the oral test the examiner is forbidden to put any question to the students, he may only ask them to read a passage. In this respect the Punjab has degenerated.

I wish the Government College could give up ordinary pass work and take only honours work. This would make a good beginning for higher teaching without raising any prejudices. Colleges should be affiliated either for pass or honours work. If the Government college became a college solely for honours students, Mission Colleges and others would emulate it.

Honours teaching.

President.—Are you sure you would get students?

Mr. Pedler.—We are carrying out this plan in the Presidency College, Calcutta by accepting only First or Second Division men.

Mr. Bell.—If the Government gave funds research work would be taken up.

The privilege of election by that Senate has been held in abeyance, not, however, because any danger arose from it.

The Senate.

Some of our best men, *e.g.*, Messrs. Gordon Walker and Chatterjee are elected Fellows. Sir William Rattigan when he was Vice-Chancellor said that he was afraid he might encounter opposition in his endeavours to reform the Syndicate, and therefore that the choice of Fellows must be practically in his hands. When we get a reformed Senate the privilege might be renewed. We have twice appealed to the Local Government, and on both occasions it simply analysed the constituency to show that it would be microscopically small as compared with the Calcutta and Madras Senates. It said that 25 years was too soon in the life of the University to give the graduates the privilege of election.

I am quite satisfied with the Syndicate as it now stands. Our Senate simply endorses the decisions of the Syndicate.

The Syndicate.

There is never any discussion in the Senate meetings; we have a long list of agenda covering 10 pages, and the Senate takes half an hour to go through it. The only lively meeting we have had lately was on the subject of the affiliation of colleges, whether the final authority should be the Syndicate or Senate. Our Syndicate has no statutory functions, it is merely mentioned in the Act of Incorporation. In the old days when I joined the University any Fellow could drop in and take part in the meetings of the Syndicate. When I was the Registrar the practice was to summon the Senate by inviting every Fellow, whilst for the Syndicate meeting notices were sent only to those Fellows who lived in Lahore or Amritsar.

Sir William Rattigan made the change. If any reference is made to the Senate about affiliation, there should be a power of veto by the Chancellor or Local Government.

Dr. Mackichan.—In Bombay this is done not by the Chancellor but by the Governor in Council.

All changes in the staff need not be reported. The staff should be judged at intervals as a whole. A College may be obliged to have an inferior man now

Staff.

and again; if a College is on the whole capable of doing its work I would not persecute it by too much interference. I would like affiliation to be both partial and terminable. It has frequently happened that a School has engaged a graduate, and that a surprise visit has shown that he is no longer there.

I think that some notice should be taken of the different standards of public examinations such as the M.A. in the different Universities. In our University it is practically impossible to get a first class in the M. A.

M.A. Examination.

Dr. Mackichan.—Why is that? Is the percentage so high or are the subjects so extensive?

Mr. Bell.—The percentage is high and the amount of reading very extensive. The system of marks also is as strict and mechanical as in the lowest examination. There is no elasticity. We have the pernicious system of putting on the paper the same number of questions and the same number of marks to each question as on the model paper. The result is that not only are the hands of the examiners tied in assigning the marks, but in the preparation of the paper also they have to keep, as far as possible, to the subjects given in the model paper.

The system is an endeavour to obviate the variations in standard largely due to the employment of outside examiners.

Outside Examiners.

I was Registrar when the rule was introduced requiring outside examiners. The rule was due to Sir William Rattigan who said that we must have outside examiners in order that they may be above suspicion. He had specially in mind the bewildering number of Oriental Examinations, but said that we must have the same rule for all. My own opinion is that a beginning might be made with some of the higher examinations in allowing teachers to examine.

I should like to see a higher class of examiners employed for the Entrance, and I should therefore like the fees to be higher.

Examiners for the Entrance.

Syed Hossain Bilgrami.—Do you think it is desirable to have English examiners?

Mr. Bell.—They will not take up the work, because we do not pay them properly, and the result is that the examination in English is conducted by the native Assistant Professor of Philosophy in the Government College. I should like to have men of the type of Mr. Hemmy, Mr. Portman, or Mr. Arnold. They would do the work if it were made worth their while. The University has cut down all fees.

Mr. Pedler.—What is your fee for the Entrance?

Mr. Bell.—Rs. 10, but we take more from private students.

Mr. Pedler.—Would you not stop the private students?

Mr. Bell.—I would, but in the discussion on the point with the Vice-Chancellor he said that the University was bound to admit them. We charge them

Private Students.

Rs. 20 each.

Mr. Pedler.—In Bengal no private student is admitted to the examination unless he is certified by the Inspector of Schools, and that officer refuses to send him up unless he passes the examination in a local or zilla school.

Mr. Bell.—At present the only certificate required here is a certificate of character from some official (Tahsildar) who knows the candidate. He certifies that the boy is fit to appear. I think higher fees and the certificate of an educational authority would eliminate a large number of private candidates.

The President.—The certificate of a private candidate must be signed according to your rule by the Deputy Commissioner or Inspector?

Mr. Bell.—Yes.

The President.—The Deputy Commissioner depends upon the Tahsildar?

Mr. Bell.—Yes.

Dr. Mackichan.—The Deputy Commissioner cannot know the boy?

Mr. Bell.—No. It is specially important that the Universities should not work in mutual antagonism by admitting private students from one another.



सत्यमेव जयते

HEADS OF REPORT.

1. *The appointment of the Commission and Summary of its Proceedings.*

2. *History ; Ancient Places of Learning*—Before the days of British rule, there were *tols*, *maktubs*, &c. Summarise evidence taken as to present condition of these places of learning. It was suggested that the Universities should take over Government examinations for Sanskrit titles where they exist. Dr. Gooroo Das Banerjee thinks the suggestion merits favourable consideration. It may also be thought feasible to do something of the same kind for Arabic and Persian.

The Punjab University was founded with the aid of the Chiefs and influential classes of the Province. Degrees in Oriental learning are conferred, and the course includes English only as an optional subject.

Except in the Punjab, I think we should deprecate any arrangement by which a degree (as distinguished from a title) can be obtained without English. Subject to this consideration, proposals for an "Oriental Side" (Madras and Calcutta) are admissible, and may be taken up in case there is any re-arrangement of Faculties.

3. *History : Early Colleges*—Were founded (a) to encourage Oriental studies, Calcutta, Madras, and Sanskrit College, Benares; (b) to extend English education, Hindu College (now Presidency College) at Calcutta. An enumeration of those existing before 1850 will show the state of things when Universities were founded.

4. *Universities : Acts of Incorporation*.—Mention the scheme of 1845, and summarise proposals of Education Despatch of 1854. The several Acts may be cited to show (1) the purposes for which Universities were established, and (2) the composition and character of the original Senates.

5. *Changes since 1857*.—There has been a multiplication of colleges, and the number of candidates in examinations has grown enormously. The rapid extension of the examination system has its drawbacks. Hurried preparation affects physique and character of students: Colleges are overburdened with what is really school work. Allowing for all defects, we

may acknowledge that much good work has been done.

6. *Teaching Universities.*—It is agreed that the legal powers of the Universities were too narrowly drawn and interpreted, and that they should be empowered to make provision for teaching. The obvious difficulties are two: (1) lack of funds, and (2) the wide areas over which Colleges are scattered. It is clearly expedient to leave the Arts students in the main to the Colleges: but the University may arrange as its head-quarters for more advanced students, providing teachers, libraries, and laboratories as required, and also hostel accommodation. In this way strong central schools of Science and Law may be created, and to these schools the outlying Colleges should send their men. The advantage of this plan is, that it may be worked out gradually, without the great initial expense of creating a complete Professoriate.

It is agreed that teachers in the Colleges may be recognised by the University, and that a College, remaining free as at present to choose its teachers, may not unreasonably be required to submit names and qualifications to the University for approval.

The suggestion that the Presidency Colleges and the Muir Colleges should be turned into University Colleges seems open to objection. These Colleges are wanted for the work they now do, and while they should be maintained in high efficiency, it is not necessary to alter their character. We want not more Arts Colleges, but schools of Science and Law as above described.

7. *Spheres of influence.*—From the Acts of Incorporation it seems that a territorial division was intended. Four Universities affiliate Colleges only, in the Presidency or Province and Native States adjoining: Calcutta has Colleges in the Punjab, the United Provinces, Assam, Burma, the Central Provinces and Ceylon.

We may perhaps agree that the University should affiliate only where it can give the necessary supervision, and recommend the changes which would give effect to this principle. The case of Ceylon must be considered in consultation with the Colonial authorities.

8. *Proposed new Universities.*—Several witnesses look forward to the establishment of Universities at Bangalore, Trichinopoly, Trivandrum, Poona, Ahmedabad, Nagpur, Rangoon. There is perhaps nothing immediately practical in any of these schemes.

In regard to Burma, we may perhaps take the line of encouraging the Province

to make preparation for having its own University; but the scheme as presented to us is premature.

9. *Constitution : the Senates.*—The evidence shows that the Senates of the older Universities are considered too large, and that they are not specially competent. On the whole, there is a decided opinion in favour of reducing the number, and laying down rules in regard to future appointments.

Some witnesses would cancel the existing Senates and make a fresh start. Others are unwilling to deprive existing Fellows of their rights, and would trust to lapse of time and more careful selection.

My tentative suggestion, modified on the advice of Mr. Justice Banerjee, is as follows :—

Enact that the Senate shall consist not of all Fellows, but of a number of Fellows not exceeding (say) 100, specially appointed or elected in this behalf. Three-fourths to be appointed by Chancellor, one-fourth elected by Senate. Members of Senate to serve for (say) five years, and to be eligible for renomination.

This plan would leave all existing Fellows in enjoyment of an honorary distinction, and would give them all the chance of becoming Senators. The Chancellor in making his nominations would be able to give a duly balanced representation to all academic interests. Fellowships might be conferred as at present, but with more regard to academic qualifications : but a Fellow would not obtain admission to the Senate until a vacancy occurs which he is competent to fill.

The above is merely a suggested compromise, and the question may be reserved for discussion.

The feeling seems to be against appointing Fellows for a term of years ; but power should be given to remove names on change of residence, etc. There should probably be an attendance test for the Senate : absence for (say) two years might vacate the seat.

When the University elects representatives to a legislative or municipal body, the Fellows, not the Senate, should be the electorate.

Election of Fellows by graduates has been introduced in the older Universities by the action of the Chancellors. The methods of such election may be prescribed from time to time. As to this, see further under " Graduates."

Election of Fellows by the Senate is provided for by statute at Allahabad and

Lahore. At Allahabad there seems to be no demand for a change of system.

10. *The Syndicate*.—The constitution of the Syndicate must be carefully discussed before we can draft this part of the Report. At this stage I can only give my individual opinion, and invite suggestions.

The evidence leads me to the conclusion that the Syndicate works best when it is a small executive body elected by the Faculties. I would therefore put aside all plans for making it a large body, or for securing separate representation for all interests.

It is contended that the teaching body has not been duly represented and considered. This, I venture to think, has not been proved, unless perhaps at Calcutta, and the evil there is, that elections in the Faculty of Arts are controlled by the pleaders. We can guard against this without altering the constitution of the Syndicate. At other Universities the teachers as a body have little reason to complain. I doubt the wisdom of having a list of *ex-officio* Syndics, as at Allahabad. The Director of Public Instruction seems to have no difficulty in securing a seat, but there would probably be no objection to making him *ex-officio* a Fellow, and member of Senate and Syndicate.

The Syndicate should, I think, have a statutory basis: that is, it should be recognised in any Act amending the Act of Incorporation, and the main lines of its constitution should be given. The question, what acts of the Syndicate may be reviewed in the Senate, is one which we shall have to discuss: I am inclined to think that this should be provided for by Regulations.

With regard to the duties of the Syndicate, we shall probably make suggestions which will involve more systematic supervision (1) of University examinations and (2) of affiliated Colleges.

11. *Faculties and Boards of Studies*.—The proposal to add graduates or teachers, not being Fellows, to the Faculties, has not met with much support. If the above scheme of Senate reform is adopted, distinguished graduates and teachers may be made Fellows and thus added to Faculties.

The weak point of the present system seems to be, that while the professional Faculties represent definite interests, the Faculty of Arts is too large and too miscellaneous. The institution of a Faculty of Science may therefore be recommended,

where no such Faculty now exists. There should perhaps be some representatives of Mathematics in Arts and some in Science.

Some simple rules for elections in Faculties may perhaps be recommended.

Sentiment seems to be in favour of assigning each Fellow to a Faculty, and the point is not perhaps of great importance.

We have had suggestions that Boards of Studies are not quite trustworthy, especially in the matter of text-books; but I am not sure that we can usefully recommend any change in their constitution.

At this point we may consider whether the "Oriental Side," if constituted, should be a Faculty.

12. *Registrar and Staff.*—There seems to be a preponderance of opinion in favour of a whole-time Registrar: and if we propose increased supervision of Colleges, the argument for a whole-time officer is strengthened.

We have not received any proposals in regard to the office staff. It has been more than once contended that University clerks are Government employes, and therefore subject to the Civil Service Regulations. The Calcutta Syndicate has declined to admit this. If legislation is agreed to, the point may be considered, and the law may be made clear. Looking to the conditions of their work, I am disposed to think that the University should make rules for the staff, and that the Civil Service Regulations should not apply.

13. *Graduates.*—It is agreed that there should be a Register, and that power should be given to charge a fee for registration. It has been suggested that the Senate should be empowered to remove from the list the name of a Fellow convicted of crime.

In 1882 Dr. W. H. Wilson proposed the establishment of a Convocation of Graduates at Madras, and a Bill was drafted to give effect to the proposal. The Convocation was to be a consultative body, its function being merely to record an opinion on any matter relating to the University, or any matter referred to it by the Senate. The Chancellor was to appoint a graduate to be Chairman. Similar proposals have been made at Calcutta. The question whether the establishment of such a Convocation would be attended with advantage may be reserved for discussion.

If a Convocation is established, the privilege of electing Fellows, now exercised by graduates generally, may perhaps be transferred to that body. Unless and until such a body exists, we may recommend that election should be made either (1) by a meeting of graduates, or (2) by voting papers, as at present.

The privilege of election, where it exists, is highly valued: but we have had some evidence to the effect that the results are not satisfactory. At Calcutta, *e.g.*, the list of elected Fellows from 1891 to 1900 shows that (leaving out of calculation elections to Fellowships expressly reserved for medical men or engineers) 16 out of 19 successful candidates were practising lawyers. Only four were engaged in University work, and hardly any had taken the highest honours. It has been proposed to alter the method of election by prescribing more closely the qualifications of the persons to be elected. This seems to me desirable. It is also suggested that there should be a rule against canvassing, and this also may be considered, though the framing of the rule may be a little difficult.

14. *Affiliated Colleges.*—It is very important that the University, before affiliating any institution, should have the fullest information about it, and to this end some alterations may be made in the rules.

It seems also necessary that the University, through the Syndicate, should satisfy itself from time to time that the standard of efficiency is duly maintained. We have before us cases in which a College, after obtaining affiliation, has lowered the standard of its teaching staff. To bring and keep all Colleges up to the mark, something in the nature of regular supervision seems to be required; and the evidence shows that if the Syndicate performs its duty with tact and consideration, such supervision will not be objected to.

As to the method of supervision, it was suggested by one witness that the Registrar might be employed, but the other duties of that officer will not leave him much time for inspecting work. It will probably be better that the Syndicate should depute competent persons (members of its own body or others) for the purpose. The candour of our witnesses have shown in admitting the defects of their own Colleges leads one to hope that in many cases they will welcome the

co-operation of the University in raising the standard.

It has been argued that the proposed visitation is unnecessary, and for this opinion two reasons are given:--

(1) It is said that the University can disaffiliate a College proved to be inefficient. To this we may answer that disaffiliation is an extreme penalty. Inefficiency such as would justify withdrawal of affiliation may be the result of a process of deterioration. The object of inspection would be to arrest deterioration and stimulate improvement.

(2) It is also said that a College which is inefficient will be punished by losing its students. I am not satisfied that the students can be relied on to keep their teachers up to the mark. They judge their College, not by its real efficiency, but by its success in examinations or by other equally inconclusive tests.

We may perhaps impose the duty of ascertaining the condition of each affiliated institution upon the Syndicate in general terms, leaving the methods to be worked as experience may suggest.

I proceed to enumerate the points which the University should take into account in estimating the efficiency of a College.

15. *Governing Body*.—If a College is to be permanent, it ought to have a constitution; it should not be wholly dependent on the interest or the wishes of an individual.

We desire to do no injustice to private Colleges, and we are aware that in some cases these institutions owe their origin to the desire of promoting a particular kind of education, and not to the desire of gain. But in all cases permanence and stability should be secured by proper safeguards.

16. *Teaching Staff*.—The adequacy of the staff in point of numbers will depend on the organisation of the courses of study. The qualifications of its members will be known to the University, if teachers are recognised as above proposed.

A College Council or Common Room at which the Principal and Professors meet to arrange their work and to compare notes about the men, appears to me an almost necessary institution, and we may perhaps suggest its introduction where it does not exist.

Some Professors have complained of frequent transfers from College to College and from subject to subject. Such transfers are rendered necessary by the conditions of work in India, but Professors should, as far as possible, be allowed to settle down to a line of work in which they can specialise.

17. *Discipline.*—In some of the large City Colleges there seems to be no special provision for this. In the Jesuit Colleges there is a Prefect who with the head of the College is responsible for discipline.

At Aligarh there is a completely developed system, under which students are subject to careful supervision, while at the same time they are themselves made to take part in the work of maintaining order. The results of the system are good, and we may perhaps commend it to the study of other colleges.

18. *Residence of students.*—At Madras there is a Regulation as to residence; and the matter is one which all Universities ought to deal with. Students should live (a) with parents or guardians, (b) in lodgings approved by the University or College or (c) in a hostel. As the term has been somewhat loosely applied, we may define "hostel" as meaning a place suitable for the residence of students, and under University or College supervision.

We have visited many hostels and shall probably agree that the following are the points on which the success of the institution turns.

It is very desirable that one or more members of the College staff should reside in or quite near the hostel. In any case the Superintendent should not be merely an upper servant; he should have some authority over the residents.

In regard to sleeping rooms it is desirable that each should have his own room: in some Colleges this has been attained: in others, as resources permit, the room which now holds two may be assigned to one.

In some hostels the students seem to read much at night, and the lamps they use are of an inferior kind. A "lights out" rule, if it be feasible, would conduce to better habits of work. The industry of the Indian student is well known, but he needs to be told that more knowledge can be acquired in six hours of real study than in twelve hours of learning by rote. Some witnesses have spoken of making the Colleges entirely residentiary, so that students would not be allowed to live even

with their parents. Such a proposal goes far beyond our resources, and it would meet with the disapproval of many who think that home life and home training are not incompatible with an adequate measure of College discipline.

19. *Courses of study.*—At present affiliation is granted up to a certain degree or standard, and the College is thereupon free to undertake any course of study leading to that degree or standard, though its staff or its appliances may be quite inadequate. History is taught in places which have no reference library, and we have seen science classes in Colleges where a student has no opportunity of handling apparatus or doing practical work. I suggest that the remedy for this is to limit Colleges to those courses which they can undertake with good effect. A rule of this kind would involve a considerable disturbance of existing arrangements, and its application will be a matter of time.

A "course of study" ought, as it seems to me, to include:—

(a) *An adequate number of lectures.*—

The adequate number need not be very large. In many cases it would be good both for teacher and class to reduce the number. We cannot of course prescribe the *quality* of lectures, but we may perhaps record our opinion that the lecturer should not merely dictate notes. The student should be taught that they come into class, not to fill a certain space in their note-books, but to exercise their minds. Occasional questions put by the professor to his class, or by them to him, will enable him to make sure that they follow and understand what he says. This is the method of our best teachers, and it is a method specially useful, and indeed almost necessary, where an English teacher is addressing Indian students.

(b) *Adequate tutorial assistance.*—An

Oxford and Cambridge, each has assigned to a tutor, who guides him generally in his work, sets him exercises, encourages him to think for himself, and helps him to solve difficulties in his lectures and books. Assistance of this kind is given at present in many Colleges, but we note the absence of any provision for it in others. It ought to be recognised as an essential part of College work.



- (c) *Access to libraries, laboratories, etc.*—The student spends only a limited number of hours in class; during the rest of the day he ought to be reading or working at his subject, not committing his lecture-notes to memory.

The certificates that the student has pursued a regular course of study should be so framed as to show that he has honestly gone through the course as above described. All rules which require merely a percentage of attendance at lectures should be recast or abolished.

20. *College and School.*—Several witnesses have laid emphasis on the expediency of marking more clearly the dividing line between school and College life. Our second-grade colleges are for the most part only High Schools which have added two F. A. classes to their programme. They keep their boys two years longer, and rise to the rank of Colleges. In this point Bombay has adopted a wiser policy; her Colleges are not too numerous, and they *are* Colleges, not schools. It should, I suggest, be our aim to effect a gradual separation, so that Arts students may receive instruction in Colleges properly so called, when they will feel that they are no longer schoolboys. In many cases, the question is one of funds. Thus, *e.g.*, at Bangalore, as soon as it is possible to provide a High School, with accommodation for 200 boys, the College may be organised on better lines.

21. *College Life.*—Some complaints are made in regard to the want of friendly association between Professors and students and even between the students themselves. This is not a matter for rules, but every encouragement should be given to societies and pursuits which bring the men together out of class; and in this connexion, much importance attaches to games, which interest men in healthy outdoor exercise, foster College patriotism, and often provide a bond of common interest between the European Professor and his pupils.

In large cities, the Universities may do something to help: as, *e.g.*, by establishing a Reference Library, with two adjoining common rooms, one for Professors and one for students, where the men of several neighbouring Colleges might meet and make friends. It may also be possible to recognise societies, such as the Calcutta Institute, which are open to students generally.

22. *College Fees.*—It has been contended that Government or the University, in

consultation with heads of Colleges, should fix a scale of minimum fees, and that exemption should not be allowed unless in special cases.

On the other hand, it is pointed out—

- (1) that rules in regard to fees are difficult of enforcement. Without exempting a student from the fee, his College may give him a scholarship, or pay part of his hostel expenses. The cases in which Indian students are assisted by private generosity are numerous, and if we raise the amount of the fee, we cannot be certain on whom the burden will fall ;
- (2) that low fees are charged, in some cases at least, not for the purpose of underselling other Colleges, but for the purpose of extending the benefit of the education given. It is in accordance with the habits and traditions of the people that students should receive not only instruction but board and lodging free.

There is force in these arguments, but the fact remains that Colleges do undersell one another. I suggest for consideration the feasibility of empowering the Syndicate, in consultation with Colleges, to fix the fee to be charged for any course of study, and that exemptions be granted only in certain cases to be indicated in the rule.

23. *Transfer of Students.*—We have been frequently told that, under existing conditions, students and schoolboys are “masters of the situation.” If teaching and discipline do not conform to their ideas, they leave the school or College and go elsewhere. Great importance therefore attaches to the framing of proper rules of transfer. In the case of Government or aided schools, the rules may be made by the Education Department, for recognised unaided schools they may be made by the University, or the University may require all recognised schools to observe the rules of the Department.

I suggest that the head of a College should be empowered to refuse a certificate of transfer. Cases of refusal should, however, be reported, with reasons, to the Syndicate.

No transfer should be allowed in the middle of a term, unless for reasons (such as *bond fide* change of residence) to be specified in the rule.

I may note further that if courses of study are everywhere brought up to the

mark as above suggested, the motives which lead students to go from one college to another will be taken away.

24. Reports on Colleges.—The Director includes the Colleges in his annual report, and if the University undertakes the duty of supervision, the Syndicate will be in possession of reports on all Colleges. We may consider whether the Director's report should not be of a more general character, and whether the statistical comparisons now in vogue should not be curtailed. Percentages are misleading if not explained: thus a College which sends in one candidate for the B. A. will have 100 per cent. passed or failed as the case may be. Letters have appeared in the newspapers in which absurd inferences are drawn from the figures relating to particular Colleges.

25. I pass now from the Colleges to the subjects included in courses of study, and methods of teaching and examination.

English.—There is a great body of evidence to the effect that our English teaching is not so successful as it ought to be. Students who have passed the Entrance are found to be unable to follow lectures in English, and though in some cases, the difficulty is said to disappear after a short time, there are other cases which seem to show that a student may never acquire complete command of the language. The advocates of commercial education tell us of B. As. who cannot write a good business letter.

The causes of this state of things begin in the schools. If the Universities are to secure good students, the schools must see that English is taught in classes of a manageable size. We cannot stipulate for European teachers in schools, but we may secure that teachers of English shall be passed through a Training College where (as, *e.g.*, at Saidapet) any faults of expression and elocution will be corrected.

In the Entrance classes, the English taught should be mainly simple modern prose, with perhaps some narrative poetry, the object being to enable the student to read with ease the books from which he will derive information on other subjects during his College course.

The question of prescribing a text-book at this stage has been much debated. A good teacher will probably always use a text-book, but my provisional opinion is that the Entrance course in English should be described in general terms, a list of books being added by way of illustration, the list to be so long as to exclude the possibility of all the books named being memorised.

In the Entrance stage, it is suggested that the books used may be mostly historical and descriptive—books from which the student may obtain useful knowledge as well as linguistic training. In the F. A. and B. A. stages, more pure literature might be introduced, and books might be set to be studied more or less minutely. In the B. A. classes, I suggest that the book set might be a prose classic, other works in prose and poetry belonging to the same period being more generally studied along with it. If the student were to read a masterpiece of Bacon, or Swift, or Burke, along with other works of the same age, he would have some notion of the resources of the English literature, and those who proceed to the M. A. in English would have a starting point from which to take a comprehensive survey of that literature.

I make these suggestions with a view to teaching; the necessary changes in the examinations will be considered later.

26. *Classical Languages.*—The place of Greek and Hebrew is a small one, and I am not sure that we have anything to say about them.

Latin is of more importance; it is taught with some success in some Colleges, and has been advocated as a necessary or very desirable subject for those about to enter on a course of medical study. The difficulty is that if we press the claims of Latin, we add to the number of subjects, whereas our first object should be to get the existing subjects properly taught.

27. *Classical Languages of the East.*—As to these I can only invite suggestions from those of my colleagues who have studied Sanskrit, Arabic and Persian. The evidence leaves on my mind the impression that India has been too little influenced by the critical method of Western scholars. Our Sanskrit and Arabic teaching appears to be too mechanical, and there is a complaint that the teachers are not on equal terms with their colleagues on the professorial staff.

28. *Vernacular Languages.*—Here again I can only note the subject as one to be considered. We may, I think, dismiss the theory that languages such as Tamil and Gujarati can claim to rank with Sanskrit. With special reference to Madras we have to discuss how far, if at all, the vernaculars are proper subjects of University teaching, and whether a degree should be given to a student who has taken up no classical language.

I see no objection to including the vernaculars among the subjects for the

M. A. A student who has received a sound general training may then proceed to take up his vernacular in a scholarly way, and by encouraging this kind of study we do the best that can be done for vernacular literature.

The vernacular is indirectly recognised where it is the language into which the student is required to translate. The evidence leads one to suspect that translations are sometimes marked for accuracy only, but I submit that no translation is satisfactory unless it is properly and grammatically composed.

If we adhere to the general principle that a classical language should be required, we shall have to consider whether the Madras system is too firmly established to admit of alteration.

29. *Mathematics*.—Some important questions of principle have been raised.

It is contended that students who have no taste for the subject should not be required to study it. The alleged want of taste may be due to bad methods of teaching and learning: and in any case it is not a question of taste, but of mental discipline.

Some object to Euclid, and desire to substitute modern books.

The assertion that mathematical subjects are crammed, that propositions are learned by heart, etc., points to the necessity for improvement both in teaching and in rules of examination.

30. *Physics and* } As to these two
31. *Chemistry*.— } subjects, I can only
invite suggestions. We may perhaps condemn all attempts to teach these subjects out of books. The new rules at Allahabad for affiliation in science seem to indicate what is necessary for practical training.

In relation to the medical course, these subjects are preliminary, and in some cases it would be a relief to the Medical School if they could be acquired in an Arts College or in a University School of Science.

The question of combining the duties of Chemistry Professor with those of Chemical Examiner is for Government. The arrangement was objected to at Lahore, and may require reconsideration.

32. *Botany, Zoology, etc.*—Here also we have to consider whether and how far these studies may be included in an Arts course, or a Science course, and whether they should be preliminary to, or a part of, the medical course.

33. *History*.—This has been mentioned several times as a subject which is usually crammed. The only remedies I can suggest are—

- (1) to define the subject by periods, books being recommended, not prescribed ;
- (2) to introduce, if it be possible, some study of original documents, as has been done for Honours men in England ;
- (3) to introduce also some use of contemporary historians, and accustom the student to handle them critically.

A reference library seems to me as necessary to the teaching of History as a laboratory is to the teaching of natural science.

The courses in History should be carefully adapted to the needs of Indian students.

34. *Political Economy*.—I am inclined to think that this subject has not taken its proper place in Indian Universities. Some teachers complain that they are restricted to the abstract doctrines of certain European and American economists, and we may consider whether it is possible to give more interest to the study, and especially to encourage the scientific treatment of Indian economic conditions.

35. *Geography*.—This subject claims attention—

- (1) as an indispensable aid to the teaching of History ; and
- (2) as a part of any commercial course which it may be possible to connect with the Universities.

The foregoing subjects are included under Arts and Science ; it remains to consider those which in the European Universities are assigned to the Faculties of Théology, Law and Medicine.

36. *Theology*.—For obvious reasons, this forms no part of the scheme of studies in Indian Universities. I doubt if we can now frame any specific recommendation in regard to it.

The scheme put before us on behalf of certain Christian Colleges was not fully worked out. If they could begin by shewing us in practice the kind of examination they propose, the question of a diploma or degree might be considered. But as at present informed, I do not feel able to accept the idea.

The comparative study of religions is recognised to some extent, as, *e.g.*, in the Calcutta course of Philosophy. Perhaps under existing considerations we cannot attempt more. Much has been done, and much remains to be done, to promote the co-operation of Indian and European scholars in the study of the Sacred Books of the East, including the Bible. But we cannot count on co-operation in regard to Divinity examinations and degrees.

37. *Law.*—We have seen various systems of law-teaching, but none of them is as yet so successful as to justify us in proposing it as a model.

The Madras Law College has been re-organised as a whole-time College. Candidates for degrees are required to have taken the B. A. degree, but may attend two terms' law-lectures before taking the B. A.: this regulation ought, I think, to be altered. Roman Law is among the subjects of the First Examination and M. L. Examination; Hindu and Mahomedan Law and Indian Constitutional Law are among the subjects of the B. L. Examination. The Law College is the only institution authorised to send up candidates for degrees. The building is good, and the library adequate.

The Bombay Law School is conducted as an evening school, the teachers being practising lawyers. The school is lodged in certain rooms of the Elphinstone College building (a building not originally designed for a College). There is no tutorial teaching, and students leave off attending lectures as soon as they have kept their terms. Prizes are given, but very few compete. There are law classes at Poona, Ahmedabad, Karachi, Baroda and Bhavnagar. Roman Law is among the subjects of the first year's course.


At Calcutta there is no central school of Law: the classes in the Presidency College were given up because they could not compete with private Colleges. Some of the private Colleges have large Law classes. Many Mofussil Colleges have a Law Department consisting of one Lecturer, or, in some few cases, of two. The Lecturer is usually a local pleader, who gives an hour in the morning or evening to the work of instruction. As a rule, the students have not access to any Law library. The prescribed course of study extends over two years and begins after the B. A. or B. Sc. A student is required to attend 24 out of 36 lectures in each of 8 subjects. He usually leaves a tending as soon as he has completed the

requisite number. Roman Law is not now taught.

At Allahabad, the Muir College, which is affiliated "up to all standards" in Law, has a staff of one Law Professor. The other Colleges affiliated in Law have one Professor or Lecturer each. At Aligarh it is recognised that one teacher cannot do justice to all the subjects, and the Professor is assisted by a small staff of local practitioners, old students of the College. The course of study prescribed by the Allahabad University extends over two years after B. A. or B. Sc. The course does not include Roman Law.

At Lahore the law teaching of the Province is centralised in the school of law. The building is unsatisfactory and the library far from adequate. There are two sections, English and vernacular. The prescribed course may be begun on passing the Intermediate and many students read Law concurrently with Arts. Those who proceed to the degree of B. L. must graduate in Arts; they are also required to study a portion of Roman Law.

On the whole, I am disposed to say that the state of legal education is not satisfactory, and with a view to its improvement I venture to suggest--

- 
- (1) That each University should provide a properly equipped central school of law. The Professors and public Lecturers may be Judges or practising lawyers: this is not in all respects a convenient arrangement, but it is the only arrangement which will secure the services of the best men. There should also be a staff of tutors, and a good library.
 - (2) That the local Law classes should disappear, except where it can be shown that a centre of *bonâ fide* legal teaching can be established.
 - (3) That the central school should be made, as far as possible, self-supporting.
 - (4) That the council or governing body of the school should be drawn from the Bench and Bar of the High Court.

As the central school is intended to attract students from a distance, the University should see to the provision of adequate hostel accommodation.

To do away with the local classes will in many cases greatly increase the expense of preparation for the legal profession. But

if a poor man desires to enter that profession, he may pay his way by scholarships, or by combining study with remunerative work as many leaders of the Bar have done in England.

38. *Medicine*.—At each University centre (except Allahabad) there is a Medical College. It seems desirable that the United Provinces and Burma should have Medical Colleges of their own.

Some members of the Medical profession have contended that the College chairs have been monopolised by the Indian Medical Service, and that medical education has suffered in consequence. In principle, I take it, the appointments are, and ought to be, open. In practice, officers of the Indian Medical Service have been preferred. The standard of scientific attainment in that service is high and its members are at the orders of Government, and can be moved about more freely than doctors in general practice. Where a Professor taken from the Indian Medical Service desires to specialize, he has been allowed to do so.

The Calcutta Medical College objects to be controlled by the Inspector General of Hospitals, and would prefer the Director of Public Instruction.

In regard to the courses of study, the following points are for consideration :—

- (1) The Arts qualification to be required of students entering on a medical course. This is usually the F. A. or corresponding examination, but at Bombay the Matriculation only is required of students who aim at a license in Medicine and Surgery. A higher qualification in this case seems desirable.

It is important to consider whether the license should be kept separate or assimilated to the degree. Some witnesses are in favour of making the M. B. the only qualification to practise.

It is also for consideration whether candidates for Medical degrees should be required to pass in Latin before beginning their professional studies.

- (2) Preparatory study of Science. It is represented that Physics, Chemistry, Botany, etc., should be taught in the Medical Colleges, so that students may be introduced to hospital work as soon as possible. The evidence on the point is not conclusive either way. It may be doubted whether any

plan which involves the displacement of chairs now occupied by Medical officers will be accepted.

- (3) Buildings and arrangements for practical work. Considerable progress has been made of late years, but a good deal remains to be done. We have had some complaints of overcrowding, and in some cases practical examinations cannot be properly conducted for want of space and appliances.

- (4) Residence of students. It is most desirable that Medical students should live near their work, and that they should be under adequate supervision. Up to now little has been done, and I think Local Governments should be invited to regard this as an urgent matter.

39. *Adjuncts of University Teaching.*—Incidental mention has been made of libraries, laboratories, etc., in the foregoing paragraphs.

Of the present University libraries there is not much to be said. The Library at Madras appears to be entirely neglected. Bombay has a good collection of Oriental books; but the library is little used by graduates and not at all by students. Calcutta has a library, and moneys have been granted for the purpose of making it "supplementary to other libraries in Calcutta." It is open to Fellows, and to persons permitted by the Syndicate to use it for the purpose of literary research. The Allahabad University is housed in the Muir College; the College Library is good. Lahore has a not very large University Library.

To form vast collections of books, such as the Universities of Europe and America now possess, would involve an expenditure far beyond our resources. Benefactors may in time arise to do for the Indian Universities what Sir Thomas Bodley did for Oxford.

But, as indicated above, I attach the utmost importance to the formation of good reference libraries.

40. *The Colleges in Relation to University Teaching.*—If the proposals put forward in this note are accepted, we have to consider the probable effect on the Colleges. If a College is restricted to those courses of study for which it can make adequate provision, there can be little doubt that in many cases their power to attract students will be affected. Schools which have a

" College Department " may find it expedient to drop the F. A. classes. Teaching will be more centralised at the University centres and in the stronger Colleges, and some weak Colleges may disappear.

While I am disposed to hold that these changes would be for the better, I am also of opinion that the standard should be raised gradually, and that time should be given even to weak Colleges to adapt themselves to any new rules which may be framed.

41. *Examinations.*—Having now enumerated the points for consideration in regard to Teaching, I proceed to the examination system.

Examination is subsidiary to teaching. The lecturer or tutor questions his pupils from time to time, to test their power of understanding what he tells them. The College examines its students periodically to make sure that they are not wasting their time.

It has been suggested that the process need not go further, that University examinations are in fact unnecessary. The colleges, it is said, may test their own men as they think fit, and may then present those who have passed the test to the University, as persons qualified to receive a degree. Objection being taken on the ground that Colleges would present candidates not really qualified, the answer given was, that Colleges acting in this way would lose credit, and that their graduates would not have the same standing as those of other Colleges.

The point is for discussion ; but I confess that this proposal seems to me unworkable. It involves a departure from the practice of all Universities. The proposal might be amended by adding that Colleges, in conducting their test examinations, should be assisted by outside examiners : but this would only amount to establishing many University examinations in place of one.

It is, however, worth considering whether arrangements can be made for examining candidates in their own Colleges (in the case of Matriculation candidates, the Colleges which they intend to join). There is no danger in establishing new centres of examination, provided that the Syndicate can secure the services of independent and trustworthy persons, who will have the custody of all papers, and be present throughout the examination. The rules which bring all candidates to the University town, or to a limited number of centres, are attended by great inconvenience and expense ; and District Magistrates

complain of the difficulties caused by the migration of large numbers of young men.

42. *Appointment of Examiners.*—Assuming that the University continues to examine, it may be agreed that examiners should be appointed, as at present, by the Syndicate.

Applications may be made as at present, but the Syndicate should itself inquire and select suitable persons.

Rules forbidding the appointment of teachers should in my opinion be repealed.

At Calcutta, members of the Syndicate are precluded from acting as paid Examiners. The rule appears to me unnecessary.

The Examiners appointed for any examination should form a Board, of whom one should be appointed Chairman.

43. *Setting the papers.*—At Calcutta, papers in some cases are set by gentlemen who do not examine. I am inclined to think that papers should be set and looked over by the same persons, but the point is for discussion.

We have had many complaints in regard to the "style" of the papers set, specially in English. A good examination paper is a work of art: it is above all things necessary that the Examiner should be able to look at his questions from the candidate's point of view, and should frame them so as to give the candidate a series of opportunities of showing how far he possesses an intelligent and first-hand knowledge of the subject matter. I have examined in several Universities and have always found that easy questions are best for this purpose: my colleagues may be able to confirm or correct this impression. An easy question enables a really good scholar to distinguish himself, while the passman puts down what he knows without waste of time.

I think the Examiners should meet to revise the papers. If a paper set by an absent Examiner is modified, he should be consulted, and time should be allowed for the purpose.

I should myself be disposed to condemn the practice of noting the number of marks assigned to each question in the margin. I would put, say, 10 questions in a paper, and print at the top that candidates may answer any seven of them.

44. *Places and times of examination.*—I have already made a suggestion in regard to places.

As for times, we have heard a good deal of the months deducted from College

courses by "preparatory leave," and by the necessity of waiting till results are out before promotions are made.

At Oxford, the great examinations are held at the end of term, and the results are out before the beginning of next term. Is this an impossible programme for India?

The terms and vacations of the Colleges seem to vary a good deal; to fix examinations on a convenient principle would conduce to greater uniformity.

45. *Marking.*—We have before us a number of Regulations and Rules prescribing percentages of marks for pass and honours.

I do not see how we can dispense with percentages altogether. Even at Oxford where an Examiner marks Pass papers "satis" or "non-satis" and Honour papers with α , β , γ , we always marked numerically, and 33 was a recognised percentage for a pass. But perhaps the rules on this point might be embodied in Instructions issued by the Syndicate to Examiners, but not published. I think the publication of the standard encourages a calculating habit of mind, so that the average student is quite afraid of learning one line more than is necessary.

The paper, having been marked, should, I think, be returned to the Head Examiner, who should examine a certain number, taken at random, to make sure that his colleagues are observing the same standard.

The Board of Examiners might then meet, to consider doubtful cases. In case a candidate has failed in one subject and shown merit in one or more others, I would give the Examiners power by unanimous vote either to pass him, or to allow him to bring up that one subject again. The Instructions might give precision to the word "merit" by specifying 50 per cent. or more of the marks. If a rule of this kind were made, "grace-marks" would be unnecessary and might be expressly forbidden.

46. *Honours and Pass.*—This subject should perhaps have been mentioned under the general head of Teaching. The advocates of a separate Honours course have been for the most part teachers, who complain that their best pupils are kept down to the standard of the Pass lectures which they attend.

So far as examinations are concerned, there are three courses to consider—

- (1) All students may be taught together and examined on the same papers, Honours being given

to those who obtain more than a certain percentage of marks.

- (2) Honours courses may be prescribed, as at Calcutta, by adding to the scope of each subject prescribed for the Pass course, and separate papers set for Honours men and Pass men.

- (3) Separate courses may be prescribed, and Honours men may be allowed to specialise after F.A.

Doubts are suggested as to course (3). Separate Honours courses would involve an addition to the teaching staff, larger than we can at present contemplate. Again, it may be premature to allow specialisation in the B. A. course. It may be better, as some witnesses suggest, to keep the M.A. as the Honours degree.

47. *Publication of Examination Results.*—Objection has been taken to publication of marks. I should not object to letting failed candidates know the marks they have obtained, but I doubt the wisdom of publishing the marks of successful candidates.

Candidates who obtain Honours are placed sometimes in order of merit, sometimes alphabetically. I should prefer to arrange each class or division alphabetically: the point is for consideration.

The percentage of passes obtained by each college may be taken out for the information of the Syndicate. But the percentage is never a conclusive test of efficiency, and the prominence given to these figures is to be deprecated. The orders under which the Directors include them in their Annual Reports should be modified.

48. *General Scheme of Examinations.*—The general scheme is 1, Entrance or Matriculation; 2, F.A. or Intermediate; and 3, B.A. The interval between 1 and 2 is two years, between 2 and 3 the same.

The Bombay Previous Examination was not strongly defended and may perhaps be regarded as unnecessary.

Some schemes are before us which involve an alteration in the character of the B.A. course. It is suggested that the Entrance standard may be raised, the F.A. Examination abolished, and the B.A. course reduced to three years. I have no abstract objection to this, but as the four-year course is now established, it seems to me that we should not recommend subversive changes unless where they are clearly needed.

From this point I must indicate the Heads of Report generally, as time will not permit me to do more at present.

Examinations.—I suggest that our Report should show, in tabular form, the compulsory and optional subjects in each examination for each of the five Universities, and should then subjoin any specific recommendations on which we may be able to agree. The proposed School Final Examination will be considered in relation to the Entrance.

Recognition of Examinations in other Universities Communication between Universities.—We shall probably agree that there has been too little of this. Without desiring to see uniformity in everything, I think there should be a certain equality of standard, and if this be established, the problem of recognition of examinations is simplified.

When we have decided what recommendations to make, we must consider how these recommendations may be carried out.

Legislation.—As soon as we agree on the constitutional question, I propose, in consultation with Mr. Justice Banerjee, to prepare the outline of a Bill.

Regulations and Bye-laws.—We shall probably make a number of recommendations involving changes in the rules made by the Universities. I suggest that the best plan would be, to empower the Government, *in consultation with persons deputed by the Senate*, to make a new body of Regulations for each University. This would give an opportunity to redraft all the rules in a convenient order. Changes might afterwards be made, as at present, by the Senate, with the sanction of Government.

Finance.—All the improvements we may suggest, or almost all, will cost money, and the question of ways and means must be closely considered.

EARLY HISTORY OF THE INDIAN UNIVERSITIES.

The creation of Universities formed an important feature in the scheme for the extension and organization of education in India which was promulgated in the celebrated Despatch from the Court of Directors, No. 49, dated the 19th July 1854. A number of colleges for imparting higher education were already in existence, but they were not connected with one another and worked up to no common or recognized standard. The earliest of these colleges were designed for the cultivation of the classical learning of the Hindus and Muhammadans, but the preference for oriental studies soon gave way before an appreciation of the greater benefit to be derived from western knowledge. Twenty years before Lord William Bentinck's Resolution decided the controversy between the Anglicists and the Orientalists, the Hindus of Calcutta founded a college "for the education in English of the children of superior castes." The earliest Indian College was the Calcutta Madrasa founded in 1782 by Warren Hastings, and for some years maintained at his expense. Other early colleges of the Province of Bengal were the Hindu College founded in 1817 and merged in the Presidency College in 1855, the Serampore College (1818), the Calcutta Sanskrit College (1824), the General Assembly's Institution of the Church of Scotland founded by Dr. Duff in 1830, the Hugli College established from the funds of the Mohsin endowment in 1835, and the Institution of the Free Church of Scotland (1843). There were also the Government Colleges at Dacca, Berhampore and Krishnagar, the Doveton, La Martiniere and St. Paul's private foundations and the Bhawanipore College maintained by the London Missionary Society. Four colleges came into existence in the North-Western Provinces before the incorporation of the University. The earliest was founded in 1791 to "cultivate the laws, literature and religion of the Hindus" and "specially to supply qualified Hindu assistants to European Judges." Colleges were founded at Agra and Delhi in 1823—1825 to which the admission was unrestricted and in which the course of studies was of a mere practical character. Both colleges, though nominally supported by Government, owed a great deal to private liberality. The fourth college, at Bareilly, arose in 1850 out of a high school founded in 1836. In the Madras Presidency the foundation of colleges began at a later date, and from the outset the Western system of education was followed. The first college was founded in 1837 by a missionary body; it was originally called the General Assembly's Institution, and is now known as the Madras Christian College. The Presidency College came into existence as a High School in 1841, and the St. Joseph's College was founded at Negapatam in 1846 by the Jesuits in charge of the Madura Mission. In Bombay the earlier collegiate education was of the oriental type, the first college, that founded at Poona in 1821, being designed "for the encouragement of the study of Sanskrit and of ancient Hindu literature and science." It merged with the English and Normal Schools into the present Arts College which began work in 1857. The Elphinstone or Presidency College had its origin in a fund raised for the foundation of Professorships in 1827. An Arabic College was founded at Surat in 1809. It retained throughout its career a purely oriental type, and fell into complete decay shortly before 1882.

2. The proposal of 1854 was not entirely new. In 1845 the Council of Education in the Bengal Presidency had recommended the establishment of a University at Calcutta, but the suggestion, although favoured by the Government of India, was rejected as premature by the Court of Directors. Nine years of progress had elapsed since that decision was given, and the Honourable Court were now convinced that the time had arrived for the establishment of Universities in India, "which may encourage a regular and liberal course of education by conferring academical degrees as evidences of attainments in the different branches of Art and Science, and by adding marks of honour for those who may desire to compete for honorary distinction."

3. The form, government and functions of the London University were considered well adapted to the needs of India, and the Court of Directors decided that they should be followed with such variations as might be necessary in points of detail. In accordance with this model, each University was to consist of a Chancellor, Vice-Chancellor and Fellows, constituting a Senate in which the general government was to be vested. The offices of Chancellor and Vice-Chancellor were to be filled by persons of high station who had shown an interest in the cause of education, and the Fellows were to include the Council or Board in which the administration of education had hitherto been vested, with additional members so selected as to give to all those who represented the different systems of education which would be carried on in the affiliated institutions a fair voice in the Senate. The function of the Universities was described as the conferring of degrees upon such persons who, having entered as candidates according to the rules fixed in this respect and produced certificates of conduct and the pursuit of a regular course of study for a given time from an institution affiliated to the University, succeeded in passing at the University such an examination as might be required of them. The detailed regulations for the examination for degrees should, the Honourable Court said, be framed with a due regard for all classes of the affiliated institutions, and the standard for common degrees should be such as to command respect without discouraging the efforts of deserving students. The standard for the senior Government scholarship was considered to be too high for the purpose. For the competition for honours, which, as in the London University, was to follow the examination for degrees, the Honourable Court enjoined the adoption of such a standard as would afford a guarantee for high ability and valuable attainments. The Honourable Court also suggested the institution of Professorships in connection with the Universities for the

purpose of the delivery of lectures in various branches of learning, for the acquisition of which, at any rate in an advanced degree, facilities did not exist in other institutions in India. They specially mentioned the subjects of Law, Civil Engineering and the vernacular and classical languages of India. The Government of India were directed to consider the institution of Universities on these principles at Calcutta and Bombay, and the Honourable Court expressed their willingness to sanction the creation of a similar University at Madras or in any other part of India where a sufficient number of institutions might exist from which properly qualified candidates could be supplied. All such institutions might, they said, be affiliated to the Universities as were capable of supplying a sufficiently high order of instruction in different branches of Art and Science, and they named the Government and private institutions in the Bengal and Bombay Presidencies which, in their opinion, fulfilled this condition. Scholarships were to be attached to the affiliated institutions, and they were to be periodically visited by Government Inspectors.

4. The Government of India decided to establish Universities at Calcutta, Madras and Bombay, and appointed a Committee to work out the details of a scheme in accordance with the outline sketched by the Court of Directors. In order to secure uniformity in important matters of principle, the Governor General in Council directed that the Committee should frame a scheme for all three Universities. While recognizing that local circumstances would necessitate modifications, the Government of India considered it essential that the legal status and authority of each University should be the same, and that at each Presidency town the same degree of acquirement in every branch of knowledge should entitle its possessor to the same kind of academical distinction and honour. The Court of Directors, to whom the Government of India reported their action, noticed these views with approval. The Committee was composed of the late Council of Education, to whom were added the gentlemen whom it was proposed to associate with them in the Senate of the Calcutta University, and the Members of the Legislative Councils of Madras and Bombay. The Government of India suggested for the consideration of the Committee that two degrees should be granted in each of the subjects embraced in the design, namely, Literature, Science, Law, Civil Engineering and Medicine, and that students should have an opportunity of taking honours for each degree. They thought that one degree of the low standard contemplated by the Court of Directors would be of little value. They also left it to the Committee to consider what titles should be assigned to the degrees, expressing a doubt whether it would be expedient to use the nomenclature which had, from long usage, become peculiar to the Universities of England. With regard to the question of University Professorships, the Government of India said that the establishment of the general Presidency College rendered them unnecessary for Calcutta, but that there would be no objection to found such as might be required either at Madras or Bombay.

5. The Committee appointed under these orders confined themselves to the consideration of regulations for the holding of examinations and the conferring of degrees; and left aside, as without their province, matters relating to the constitution and government of the Universities. Sub-Committees were appointed to prepare regulations for each of the Faculties of Arts, Medicine, Law and Civil Engineering, and the schemes which they devised were submitted to the Governments of Bengal, Madras, Bombay and the North-Western Provinces. After considering the criticisms made on the proposals, the Sub-Committees modified the draft rules and presented them to the General Committee. The latter made some alterations and then forwarded the scheme to the Government of India. Subject to remark on one or two points, it was approved both by the Governor General in Council and by the Court of Directors.

6. The regulations proposed by the Committee followed as closely as possible the mode of the London University. An Entrance Examination was to be held once a year at the chief towns in the Presidencies to which any person might be admitted who was not less than 16 years of age and could produce a certificate of good moral character. The nature of the examination did not greatly differ from that of the London University except in the matter of languages. Two languages were made compulsory, of which one was English and the other might be a western or oriental classical language or an Indian vernacular. The other subjects were elementary mathematics, history and geography, and natural history. After passing the Entrance Examination, the candidate was, unless specially exempted, to study at one of the institutions affiliated to the University for the period prescribed for the examination in which he intended to take a degree. The Madras Government and some other authorities proposed that candidates should be admitted to the degree examinations without being required to study at an affiliated institution, but this suggestion was negatived and the importance of affiliation in the University scheme was emphatically affirmed. Every institution affiliated to one University was to be recognized by all the others, so that a candidate might take his degree in one Presidency although he studied in another. With regard to the question of nomenclature, the Committee advised that the English University phraseology should be adopted, considering that it would be a great advantage to assign titles to the graduates which were familiar to the educated classes throughout the Empire, and which would at once serve to mark the grade and value of the attainments they were intended to represent. They recognized that the adoption of the English nomenclature entailed the adoption of an English standard, and they therefore prescribed a degree of attainments which they considered not inferior to that required by the London University.

7. In Arts it was proposed to grant the degrees of Bachelor and Master. Candidates might present themselves for the B. A. Examination, after studying for three years at an affiliated institution, but the degree could not be taken until four years from passing the Entrance Examina-

ation. An examination in honours was to be held immediately after the common degree examination, and the degree of M.A. was to be conferred on those who passed the honours examination, either immediately after the B.A. examination or at any subsequent time. Those who went up for the honours examination after an interval for the purpose of the M.A. degree were not to be considered as having passed in honours. The B.A. test was one of general acquirements, and did not contemplate any system of bifurcation of studies. Candidates were required to pass in languages, history, mathematics and natural philosophy, physical science and mental and moral sciences. As in the Entrance Examination, the candidates were to take up two languages: English and a classical language or Indian vernacular. The regulation of the standard was the subject of some discussion. The Committee considered that the declared standard should be a maximum, such as to indicate, in each branch, the highest amount of knowledge which a student, of ordinary capacity, might be expected to acquire in a four years' course of study, while the minimum of competence entitling to a degree should be determined by the examiners acting under the instruction of the Senate. Lord Canning's Government thought the wide range of subjects, unaccompanied by a definite minimum standard, might encourage discursive reading and superficial study, and they therefore suggested that, without attempting to define accurately the minimum to be exacted in each branch of study, it should be declared necessary that a thorough knowledge of some branches up to a certain point, or a complete mastery of certain recognized text-books, should be exhibited, not as in itself sufficient to secure even a bare degree, but as a condition without which no degree should be granted. The Court of Directors endorsed this view, and it was adopted by the Senate of the Calcutta University, who, in framing the regulations, required candidates to show, in addition to a competent knowledge in each of the five branches of the examination, a special acquaintance with the grammar and idiom of the languages they might select, the history of India (Elphinstone's text-book), elementary arithmetic and algebra, Euclid, and the elements of logic. Successful candidates were to be classed in two divisions, each in alphabetical order. Students passing in the first class might take honours by passing a higher examination in any one or more of the five branches of knowledge comprised in the B.A. course. Candidates taking up languages were required to pass either in Latin and Greek or in English and Arabic or Sanskrit. Successful candidates were to be divided into three classes, each in order of merit, account being taken of the proficiency displayed in the corresponding portion of the B.A. examination.

8. The following scheme of Medicine was proposed by the Committee:—

First.—An examination in the theoretical branches of medical science, to which all candidates might be admitted who had studied for two years in a recognized school after passing the Entrance Examination.

Second.—An examination for the degree of Licentiate in Medicine (L.M.) to be passed after another three years' study at a recognized school.

Third.—An examination for honours in any one or more of the chief branches of medical science, to be held immediately after the Licentiate examination.

Fourth.—An examination for the degree of Doctor in Medicine (M. D.), to which only such candidates might be admitted as had taken the B.A. degree, and had been engaged in the study or practice of medicine for two years after taking the degree of Licentiate.

The above scheme corresponded to that adopted in the London University, the main points of difference being that candidates for the Licentiate's degree might commence their professional studies immediately on passing the Entrance Examination, instead of waiting, as at London, two years for the B.A. degree, and that the course of study for the Licentiate's degree was extended from four to five years in accordance with the practice of the medical schools in India, and to compensate for the comparatively early stage at which the medical studies commenced.

9. The Sub-Committee for Law could not follow closely the model of the London University because they had to take account of the systems prevailing in India. Their difficulties were enhanced by the absence of any system of higher legal training. The subjects and standards of the examinations, the preliminary course of study, and the qualifications in general knowledge to be required of the candidates were all the subject of discussion. It was finally settled that the Universities should grant a degree of Bachelor of Law (B.L.), and that candidates should be admitted to the examination for the degree after one year from the date of obtaining a degree in Arts, and after attending lectures in a recognized school for three years. An examination in honours was to be held shortly after the degree examination. The subjects for the common degree were the general principles of jurisprudence and the several systems of municipal law which obtain in India.

10. The grant of a degree in Civil Engineering was an advance on the practice of the London University. In proposing the regulations the Sub-Committee had regard to the constitution and objects of the Engineering College at Rurki and the similar institution which was to be opened near Calcutta. They remarked that the diplomas granted by the colleges would still be held as sufficient evidence of ordinary attainments and ordinary competence, while the University degree would attest the possession of higher professional attainments, of general scientific knowledge, and of the fruits of intellectual cultivation. The scheme worked out on these principles provided for an examination for the degree of Master of Civil Engineering (M. C. E.) to which candidates might be admitted who had obtained the degree

of B.A., and had since passed four years in the study and practice of their profession. An examination in honours was to be held shortly after the examination for the degree.

11. In concluding their report the Committee observed that their project was applicable in all its essential parts to the Universities that might be established in other Presidency towns as well as to the University of Calcutta, and they recommended that while the Senates should be allowed ample latitude for the adaptation of the scheme to local circumstances, their proceedings should be subject to a central authority such as the Governor General in Council. The Government of India agreed that this was necessary, and directed that the proceedings of each Senate should be reported to them, and that all bye-laws and regulations should receive the sanction of the Governor General in Council. The Acts of incorporation passed shortly afterwards did not provide for the exercise of any control by the Governor General in Council over the Madras and Bombay Universities, but there is nothing in the discussion on the Bills to show why this feature of the scheme did not receive legislative sanction.

12. The Government of India reviewed the Proceedings of the Committee in a Resolution, dated the 12th December 1856. After approving the recommendations, they proceeded to consider the steps to be taken for the speedy establishment of the proposed Universities. The draft of a Bill of Incorporation which had been generally approved by the Governor General in Council was placed in the hands of the Honourable Sir James Colville, Chief Justice of Bengal, who had been President of the Committee and was afterwards first Vice-Chancellor of the Calcutta University, in order that he might take charge of it in the Legislative Council. In anticipation of the action of the Legislature, the Governor General in Council declared that the Governor General of India and the Governors of Madras and Bombay should be the Chancellors of the three Universities, and appointed the Vice-Chancellor and *ex-officio* and ordinary members of the Senate of the Calcutta University. Twenty-nine ordinary fellows were nominated. It was left to the Governors of Madras and Bombay to appoint the Vice-Chancellors and Fellows of these Universities. The newly appointed Calcutta Senate were directed to promulgate the rules proposed by the Committee and sanctioned by the Government of India, and to pass such other rules, and take such further measures, as might be necessary to give early and full effect to the scheme.

13. The Bill for the Incorporation of the Calcutta University was introduced on the 3rd January 1857, and was passed, without any considerable discussion, on the 17th of the same month. The preamble of the Act recites that, in order to encourage the pursuit of a regular and liberal course of education, "it has been determined to establish an University at Calcutta for the purpose of ascertaining, by means of examination, the persons who have acquired proficiency in different branches of Literature, Science and Art, and of rewarding them by Academical Degrees as evidence of their respective attainments, and marks of honour proportioned thereunto." The first section names the original Chancellor, Vice-Chancellor and 38 Fellows of the University, and constitutes them and their successors to be a body politic and corporate by the name of the University of Calcutta with perpetual succession, a common seal, and power (section 2) to hold and dispose of property. The Chancellor, Vice-Chancellor and Fellows for the time being are declared by section 3 to be the Senate. The Vice-Chancellor is appointed from among the Fellows by the Governor General Council, and the term of office is two years subject to re-election. The Lieutenant-Governors of Bengal and the North-Western Provinces, the Chief Justice of Bengal, the Bishop of Calcutta, and the Members of the Supreme Council are *ex-officio* Fellows. Ordinary Fellows are appointed by the Governor General in Council; the total number may not be less than 30, but no maximum limit is fixed. Fellows are appointed for life, provided that the office is vacated by leaving India without the intention of returning, and that the Governor General in Council may cancel the appointment of any Fellow. The superintendence of the University and its property are vested in the Senate. The Senate are authorized to make and alter bye-laws regarding ordinary and honours examinations; the grant of degrees and marks of honour; the qualifications of candidates, the previous course of instructions to be followed by them, and the preliminary examination to be submitted to by them; the mode and time of convening the meetings of the Senate; and, in general, all matters regarding the University. All such bye-laws and regulations must be submitted for the approval of the Governor General in Council. At meetings of the Senate questions are decided by the majority of the members present, the Chairman having both an ordinary and casting vote. The Senate have full power to appoint and remove all examiners, officers and servants of the University. Section 11 empowers the Senate to grant after examination the degrees of Bachelor of Arts, Master of Arts, Bachelor of Laws, Licentiate of Medicine, Doctor of Medicine and Master of Civil Engineering. These are the degrees recommended by the Committee. At a later date it was desired to confer other degrees, and Act XLVII of 1860 was passed to enable the Senate to grant any degree appointed by regulation or bye-law. Section 11 also confers the power to grant marks of honour for a high degree of proficiency. Except by special order of the Senate, no person may be admitted as a candidate for a degree unless he present a certificate from one of the institutions authorized in that behalf by the Governor General in Council, to the effect that he has completed the prescribed course of instruction. An examination for degrees must be held at least once in every year, the examiners are appointed by the Senate and may or may not be themselves Fellows, and it rests with the Senate to prescribe the subjects and manner of examination. At the conclusion of every examination, the examiners are required to declare the name of every candidate who has earned a degree, his proficiency in relation to other candidates, and the honours he may have gained, and every such candidate is entitled to receive a certificate from the Chancellor

declaring these particulars. The Senate are empowered, with the approbation of the Governor General in Council, to charge reasonable fees for degrees, upon admission into the University and for continuance therein. The fees are credited to a General Fee Fund for the payment of the expenses of the University under the direction and regulations of the Governor General in Council, to whom annual accounts are required to be submitted.

14. At first meeting of the Senate, which was held on the 3rd January 1857, a small Provisional Committee was appointed to carry on current business and to frame in consultation with the Faculties the rules required for the future guidance of the Faculties. The Senate finally passed the bye-laws and regulations presented by the Provisional Committee on the 5th September 1857. They were forwarded to the Government of India, and received the assent of the Governor General in Council on the 30th of the same month. The regulations for the different Faculties were in almost exact accord with those already approved by the Government of India. The bye-laws laid down a few general rules for the Senate, and regulated the appointment and functions of the Faculties, Syndicate and Registrar. A date was fixed for the annual meeting of the Senate, provision was made for other meetings, and it was declared that nine members should constitute a quorum. The Senate was divided into the four Faculties of Arts, Law, Medicine and Engineering. Every member of the Senate was required to belong to one and might belong to more than one Faculty. The appointment of the Faculties was entrusted to the Senate at its annual meeting. The Faculties were to appoint their own Presidents, meetings were to be convened by the President, and three members were to constitute a quorum. The bye-laws vested the executive government of the University in a Syndicate consisting of the Vice-Chancellor and six Fellows—three from the Faculty of Arts and one from each of the other Faculties. The members were to be elected annually by the Faculties. It was provided that the members must reside in or near Calcutta, and that four members should constitute a quorum. The functions specially devolved on the Syndicate were the appointment and removal of examiners and officers, other than the Registrar; the ordering of examinations; the grant of degrees, honours and rewards; the keeping of accounts and the conduct of correspondence. The Syndicate was also empowered to frame bye-laws and regulations subject to the approval of the Senate, and it was provided that no question should be considered by the Senate which had not, in the first instance, been considered and decided on by the Syndicate. The appointment of Registrar remained with the Senate. The term of office was fixed at two years subject to re-appointment. The Registrar was appointed the general custodian of the property of the University, and he was required to keep the record of the proceedings of the Senate.

15. The University has retained these rules almost unaltered. Regulations have been added constituting Boards of Studies and Accounts and providing for the grant of leave to the Registrar; but in so far as the original bye-laws are concerned, the chief changes that have been made are the alteration of the date of the annual meeting from the second Saturday in December to the third Saturday in April, and the increase in the number of members of the Syndicate from six to ten.

16. The question whether the standard for the Entrance and B. A. Examinations had not been fixed at too high a level soon came under discussion. At the Entrance Examination held in 1858 only 111 out of 464 candidates passed, whilst at the B.A. Examination not one of the 13 candidates came strictly up to the assigned standard, though the Syndicate were induced by special circumstances to award a degree to two of them. After considering reports from the examiners, the Faculty of Arts proposed the omission of certain subjects from the Entrance Examination, a reduction in the minimum number of marks for both examinations, and a change in the construction and practice of the Board of Examiners. These proposals were accepted by the Senate, who agreed that the range of subjects for the Entrance Examination was too wide, that the difficulty was aggravated by the deficiency in the means of instruction in Natural Science, and that the character of the examination had derived much severity from recollections connected with the senior Government scholarship tests. The chief changes proposed in the regulations concerned the Entrance Examination, and involved the omission of an oral test, the narrowing of the prescribed course of history, and the exclusion of mechanics and natural history from the subjects of examination. These alterations were duly sanctioned by the Governor General in Council. The B.A. course was left untouched.

17. The establishment of the other two Universities proceeded on lines parallel to those of Calcutta. The Government of India forwarded to the Governments of Madras and Bombay the report and regulations of the Universities Committee and the Resolution of December 1856 approving the Committee's proposals. At the same time, they instructed the Local Governments to appoint the Senates and to organize the new Universities. A list of Fellows having been received from the Government of Madras, the Madras Universities Bill was introduced on the 2nd May 1857 and received the assent of the Governor General on the 5th of September following. It cannot be traced from the records that the Government of Madras forwarded the bye-laws and regulations of the University for the approval of the Government of India. At the request of the Governor General in Council, they sent in October 1858 a copy of the bye-laws, which followed almost verbatim those framed by the provisional Committee of the Calcutta Senate. They have since been largely altered and extended. The regulations for examinations and degrees differed in several respects from those recommended by the Universities Committee. No age restriction was imposed for the Entrance Examination, and in the list of subjects for that examination oriental classics and natural history were omitted. An important change was made in the syllabus for the B.A. Examination, which will be noticed in a later paragraph. No provision was made for an honours examination in connection with the B.A. degree, but a separate M.A. Examination was prescribed corresponding to the

Honours Examination in Calcutta. Candidates for the B.L. degree were not required to take a degree in Arts. The regulations in medicine were generally similar to those for Calcutta. In Engineering, in addition to the degree of Master, a lower degree with a three years' course was introduced. For neither degree were candidates required to have graduated in Arts.

18. The Bill for the incorporation of the University of Bombay was introduced on the 14th March 1857, and received the assent of the Governor General on the 18th of July, but the bye-laws and regulations were not forwarded for the approval of the Governor General in Council until December 1858. The bye-laws followed closely those of the Calcutta University. The regulations were modelled on the recommendation of the Universities Committee, but the Senate made a number of verbal and formal alterations and also modified some of the regulations in substance, the most important change being in the B.A. standard. With a view to preserve the uniformity on which so much stress had been laid, the draft Bombay regulations were sent for the consideration of the Senate of the Calcutta University. The Senate were at that time considering the need for amending some of the regulations, and on the receipt of the letter from the Government of India they instructed the Faculties to prepare a revised code, directing them at the same time to take into consideration the regulations of both the Madras and Bombay Universities. The reports of the Faculties and the proposed alterations in the bye-laws and regulations were submitted to the Government of India in February 1860. In addition to a number of minor alterations, the letter from the Senate dealt with the Arts Standard in the three Universities, the institution of a preliminary examination for the Arts degree, and the creation of new degrees in the Faculties of Law and Civil Engineering.

19. The course for the B.A. degree in Madras and Bombay was found to be narrower than that fixed by the Universities Committee. For the Calcutta examination candidates were required to show a competent knowledge in certain portions of each of the following subjects :—

1. Languages.
2. History and Geography.
3. Mathematics including Mechanics.
4. Moral Philosophy.
5. Logic and Mental Science.
6. Physical Science.
7. Natural Science.

The Senate of the Bombay University recommended that the first five of the above subjects should be compulsory, and that candidates should also be required to pass in one only of the following subjects :—

- (a) Rhetoric and Criticism.
- (b) Dynamic and Hydrostatics.
- (c) Optics and Astronomy.
- (d) Chemistry, Heat, Electricity.
- (e) Physiology, Vegetable.
- (f) Physical Geography with its influence on history.

In proposing this alteration the Bombay Senate said that in the then existing state of education in Western India it would be injurious to the students to require them to qualify according to so multifarious a standard as that which obtained at Calcutta, and that it would be preferable to require a sound knowledge of fundamental subjects and of one other subject to be chosen by the candidate. In the scheme adopted by the Madras University the range of subjects was still further narrowed, candidates being required to pass only in the first four and any one of the last three of the Calcutta subjects. The Arts Faculty of Calcutta opined that these changes lowered the standard to such a degree that it no longer afforded sufficient evidence of a liberal education. They therefore deprecated any change in the Calcutta rules.

20. The proposal to institute a preliminary or first examination in Arts emanated from the Faculty of Civil Engineering who desired to create a professorial degree for which the standard of general attainments should be intermediate between the Entrance and the B.A. level. The proposal was adopted by the Faculty of Arts who considered that it would be an advantage to distribute the examination over the long period of study. The preliminary examination was to be undergone two years after the candidate entered the University. The subjects were :—

In English	A somewhat lower standard than that required for the B.A. degree.
In History	} Part of the B.A. course.
In Mathematics and Natural Philosophy	
In Mental and Moral Philosophy	The B.A. course.

The lower mathematical subjects and the history comprised in the syllabus of the first examination were excluded from the B.A. course, which otherwise remained unaltered.

21. The proposed new degrees were Licentiate in Law, Doctor of Law and Licentiate in Civil Engineering. The principal reason for introducing the degree of Licentiate in Law was the fact that the obligation to pass the B.A. Examination, which was a necessary condition

for the B.L. degree, might deter many students from prosecuting legal studies. For the new degree candidates were only required to pass the first examination in Arts, and although the professional subjects were the same as in the B.L. examination, the course of study was a year shorter and the questions were less advanced. The change does not appear to have worked successfully, for no licentiate examination in law is now held at Calcutta, Madras or Bombay. It was proposed to confer the degree of Doctor of Law in order to hold out a greater inducement to students to enter for the honours course. The regulations for the grant of the degree followed those for the degree of Master of Arts, except that it might not be conferred until four years after taking the degree of B.L. The conditions for the degree of Master of Engineering were so onerous that it was feared that the regulations regarding it would remain a dead letter. The Senate was loth to lower the standard, and it was therefore decided to create the lower degree of Licentiate in Civil Engineering, corresponding to the Licentiate in Medicine and the proposed Licentiate in Law. The professional examination was fixed at a lower standard than that for the M.E. degree, but nevertheless was to suffice to test a high order of professional ability and acquirements. The condition of a degree in Arts was dispensed with, but candidates were required to pass the First Arts Examination.

22. The proposals of the Calcutta Senate were approved by the Governor General in Council in March 1860. In the matter of the uniformity of standards, the Government of India departed somewhat from the views they had formerly held, and Sir Bartle Frere went so far as to contend that the maintenance of such uniformity was not a matter of importance. Accordingly, in communicating the views of the Calcutta University to the Governments of Madras and Bombay, the Governor General in Council said that no alteration should be forced on the Senates with a view to the further assimilation of the regulations of the different Universities.

23. The Acts of Incorporation recited by name the degrees which might be conferred. The proposal to grant other degrees could not be carried out without legislation. A supplementary Act (No. XLVII of 1860) was therefore passed empowering the Senates of each of the Universities to grant such diplomas or licenses in respect of degrees as had been or might be appointed by bye-laws or regulation. The passing of this Act closes the first period in the history of the Universities. From the year 1860 to the present time their growth has been in many respects in divergent directions, and the regulations and standards for degrees now differ largely both from the original model and from one another.

R. NATHAN,—2-2-02.





सत्यमेव जयते

COMPARISON OF THE ARTS COURSES AND STANDARDS IN THE SEVERAL UNIVERSITIES.

This note compares in the first place the conditions which students must fulfill before being permitted to offer themselves as candidates for entrance into the Universities. It then gives an outline of the Arts course in each University, and finally proceeds to the main task of comparing for the successive examinations included in the course the subjects prescribed by each University and the standards in those subjects to which successful candidates are required to attain. I have made a more minute investigation for the Entrance and B.A., than for the Intermediate and M.A., Examinations; because the matters requiring most particular consideration would appear to be the class of students who are admitted to the Universities and the educational level which is denoted by the B.A. degree. The standard of the Intermediate Examination is regulated by the Entrance and B.A. Examinations which precede and follow it, whilst the M.A. standard is everywhere a fairly high one, which comparatively few students succeed in reaching.

PRELIMINARY CONDITIONS TO BE FULFILLED BY CANDIDATES FOR THE ENTRANCE OR MATRICULATION EXAMINATION.

The regulations proposed by the Universities Committee in 1857 admitted any person to the examination, wherever educated, provided that he was not less than 16 years of age and could produce a certificate of good moral conduct. The following is an outline of the existing regulations of the different Universities:—

Calcutta.—Any person, wherever he may have been educated, can be admitted to the Entrance Examination. Candidates are divided into high school and private students. A high school is a school recognized by the Syndicate as qualified to send up candidates to the Entrance Examination. A high school student must produce a certificate from the Head Master or Principal that he is of good moral character and that there is a reasonable probability that he will pass the examination. A private student must produce a similar certificate signed or countersigned by an Inspector of Schools. There is no age restriction.

Madras.—The candidate must produce a certificate from the Head Master of his school that he has completed the course of study prescribed for high schools, that he has been attending a recognized high school from the commencement of the year, that his conduct is satisfactory and that he is qualified to enter upon a University course. Candidates who are more than twenty years of age may be exempted from this rule on presenting a certificate of age and good character signed by one of certain specified educational authorities. The Syndicate may also in special cases exempt candidates who are less than twenty years of age on the production of satisfactory evidence of character and of having received suitable instruction. There is no age restriction.

Bombay.—The candidate's application must be accompanied by a certificate of assent from his school-master, teacher or guardian, and a certificate of moral character signed by the school-master, teacher, guardian or some other person of known respectability. There is no obligation to have studied at a recognized school and no certificate of attainments is required. There is no age restriction.

Allahabad.—Candidates must have resided or studied for not less than a year in the North-Western Provinces, Central Provinces, Rajputana or Central India, and must have completed the age of 16 years. There are two classes of candidates, private candidates and those who appear from a recognized school. School candidates must produce a certificate from the Head Master of age and character, and of attendance at a regular course of instruction since the commencement of the school year. Private candidates must produce a certificate of age and character from one of several specified educational authorities.

Punjab.—Candidates are divided into public school and private students. A public school student's name must have been borne on the rolls of a school fulfilling certain prescribed conditions during nine out of the twelve months preceding the examination. Every candidate must produce a certificate of good character signed or countersigned by a public or educational authority belonging to certain classes. The names of public school students must be submitted by the Head Master or Manager of the school. No certificate of attainments is required and there is no age restriction.

THE ARTS COURSE.

The following is an outline of the Arts Course prescribed in each University:—

Calcutta.—The Entrance Examination. Two years' course followed by the First Examination in Arts. Two years' course followed by the B.A. Examination, either common or in Honours. The M.A. Examination.

Madras.—The Matriculation Examination. Two years' course followed by the First Examination in Arts. Two years' course followed by the B.A. Examination in three Divisions which may be taken together or in separate years. The M.A. Examination after two years' interval.

Bombay.—The Matriculation Examination. One year's course followed by the Previous Examination. One year's course followed by the Intermediate Examination. Two years' course followed by the B.A. Examination. The M.A. Examination. The M.A. degree cannot be taken until 5 years from Entrance.

Allahabad.—The Entrance Examination. Two years' course followed by the Intermediate Examination. Two years' course followed by the B.A. Examination. Two years' interval and one year's course, or one year's interval and course for graduates in honours,* followed by the M. A. Examination.

* For meaning of this term see page 13.

Punjab.—The Entrance Examination. Two years' interval for private or course for college students, followed by the Intermediate Examination. Two years' interval or course followed by the B. A. Examination. The M. A. Examination. The degree of Doctor of Literature which may be taken after five years from Entrance.

THE ENTRANCE EXAMINATION.

PART I.—SUBJECTS OF EXAMINATION.

In Calcutta the subjects are—

- (1) English.
- (2) A European or Oriental Classical Language or an Indian or European Vernacular Language.
- (3) Elementary Mathematics.
- (4) History and Geography.

In Madras and Bombay the subjects are the same with the addition of Elementary Science. In Allahabad and the Punjab they are also the same with the omission of the vernacular language. In the Punjab the candidate may take up a fifth voluntary subject consisting of either a vernacular language, elementary science or a second classical language. This counts towards his place on the list, but not towards his pass marks.

PART II.—DETAILS OF SYLLABUS.

English.—In each University questions are put on grammar, idiom, construction and composition. In Calcutta, Madras and Allahabad vernacular students translate passages into English and English students write an essay in place of this examination. In Bombay the alternative is between translation and paraphrase, and all students are submitted to the same essay test. In the Punjab there are separate examinations for vernacular and English students. The former in addition to being examined in grammar, composition and essay writing are required to translate passages both into and from the vernacular and to read aloud. The latter are subjected to a more difficult test in grammar, composition and essay, and are also required to paraphrase, and answer questions on the meaning and derivation of words. Only Calcutta and Allahabad have a paper on set prose and poetical works; the other Universities do not require any knowledge of English literature. In Madras the paper on literature is replaced by one on paraphrase and composition. The examination at Bombay comprises only one paper, whilst there are three at Calcutta and Madras.

Second Language.—In each case the classical languages are the same, namely, Latin, Greek, Hebrew, Persian, Arabic and Sanskrit. In Calcutta and Madras the European languages are French and German and in Bombay French and Portuguese. In Calcutta, Madras and Allahabad there is one paper on prescribed text-books and grammar and one paper on translation. The pieces to be translated into the classical language consist of sentences or easy passages. In Bombay there are no prescribed text-books and one paper only is set on translation and grammar. In the Punjab there is one paper with prescribed text-books on translation from the classical language into the vernacular with explanation of passages, and a second paper on grammar and the translation of easy passages from the vernacular into the classical language.

Mathematics.—The general course includes Arithmetic up to stocks and discount, Algebra up to simultaneous equations and the first four books of Euclid with simple deductions. In Madras the Algebra includes quadratic equation, and only the first three books of Euclid are required. In Allahabad and the Punjab questions are put on Mensuration. The standard appears to be much the same throughout.

History and Geography.—The historical course includes the outlines of English and Indian history. Text-books are prescribed in Calcutta and Allahabad, but not elsewhere. The Calcutta and Allahabad papers appear rather harder than the rest. In all the Universities the Geographical course comprises elementary general geography with that of India in particular and the outlines of physical geography. Text-books are prescribed only in Calcutta and Allahabad. Four text books including two science primers are included in the Calcutta list, and only one general text-book in the Allahabad list.

Elementary Science.—In Madras questions are set from Balfour Stewart's Physics and Roscoe's Chemistry, both in Macmillan's Science Primer series. In Bombay the subjects are the Parallelogram of Forces and Mechanical Powers, Chemistry from the above text-book, and Astronomy from Lockyer's Primer in the same series.

PART III.—MARKS.

Calcutta.—Maximum marks are as follows :—

English	{ 1. Text Books and Grammar 120 2. Translation and Composition 80 }	200
Second Language	{ 1. Text Books and Grammar 80 2. Translation and Composition 40 }	120
Mathematics	Two papers of 80 each	160
History and Geography	Two papers of 60 each	120
TOTAL		600

To pass, candidates must obtain 33 per cent. in English, 25 per cent. in the remaining subjects, and 33 per cent. in the aggregate. Candidates obtaining 50 per cent. in the aggregate are placed in the first, and 40 per cent. in the second division.

Madras.—Maximum marks are as follows :—

English	{ Language 70 Paraphrase and Composition 50 Translation and Essay 30 }	150
Second Language		80
Mathematics	{ Arithmetic 50 Geometry 35 Algebra 35 }	120
Physics and Chemistry		80
History and Geography	{ History 50 Geography 30 }	80
GRAND TOTAL		510

To pass, candidates must obtain 40 per cent. in English and 35 per cent. in each other subject. Candidates obtaining 60 per cent. in the aggregate are placed in the first class.

Bombay.—Maximum marks are as follows :—

English	{ Translation or Paraphrase 35 Essay 40 Language 65 Neatness and writing 10 }	150
Second Language		100
Mathematics	{ Arithmetic and Algebra 90 Euclid 90 }	180
History and Geography		100
Elementary Science		100
GRAND TOTAL		630

To pass, candidates must obtain one-third marks in each language and one-fourth marks in each other subject. There is no division into classes.

Allahabad.—Maximum marks are as follows :—

English	150
Mathematics	100
History and Geography	100
Classical Language	100
TOTAL	450

Qualifying marks are as follows :—

250 or 50 per cent., First Division ; 200 or 40 per cent., Second Division ; 165 or 33 per cent., Third Division.

Punjab.—Maximum marks are as follows :—

English :	Reading	10
	Grammar	30
	Composition	40
	Translation into and from Vernacular	70
TOTAL .		150

For students whose vernacular is English the marks are as follows :—

Reading	10
Grammar	30
Explanation and derivations of words	30
Paraphrase	40
Composition	40
TOTAL .	150

Second Language—

(a) Vernacular : Composition	50
Grammar, etc.	50
TOTAL .	100

(b) Classical language : Translation from the language	75
Grammar	35
Translation into the language	40
TOTAL .	150

(c) Persian : Translation from Persian	60
Grammar	25
Translation into Persian	35
TOTAL .	120

History and Geography : History	55
Geography	45
TOTAL .	100

Mathematics : Arithmetic and Algebra	75
Euclid and Mensuration	75
TOTAL .	150

Physical Science : Oral and Practical	30
Physics	50
Chemistry	40
TOTAL .	120

The total maximum marks in the compulsory subjects are 550 or 520 according as the candidate takes up a classical language or Persian. The maximum marks in the voluntary subjects are Vernacular Language 100, Elementary Physical Science 120, Classical Language 150. The grand total obtainable lies therefore between 620 and 700. To pass, the candidates must obtain 33 per cent. in English, 25 per cent. in every other subject and 33 per cent. in the aggregate; 340 marks place the candidates in the first and 240 in the second division.

INTERMEDIATE OR FIRST ARTS EXAMINATION.

PART I.—SUBJECTS.

Calcutta.—Compulsory subjects :—

- | | |
|----------------------|---------------------------|
| 1. English. | 3. Mathematics. |
| 2. Second Language. | 4. Physics and Chemistry. |
| 5. History or Logic. | |

Candidates may also take up one of the following :—

- | | |
|--------------|-----------------------|
| (a) Logic. | (c) Physiology. |
| (b) History. | (d) Sanitary Science. |

Madras.—The following subjects are compulsory :—

- | | |
|---------------------|--------------------------------|
| 1. English. | 3. Mathematics. |
| 2. Second Language. | 4. Physiology or Physiography. |
| 5. History. | |

Bombay.—The following subjects are compulsory at the Previous and Intermediate Examinations :—

Previous.

1. English.
2. Second Language.
3. Mathematics.
4. History.

Intermediate.

1. English.
2. Second Language.
3. Mathematics and Physics.
4. Logic.

Allahabad.—The subjects are divided into three groups of which candidates must take up the first and either the second or third.

Group 1. English and first course of Mathematics.

Group 2. Logic, a Classical Language, either History or a second course of Mathematics.

Group 3. Second course of Mathematics and Physics and Chemistry.

Punjab.—

1. English.
2. Second Language.
3. Mathematics.

and one of the following :—

- | | |
|-----------------|--|
| (a) History. | (c) A branch of Physical or Natural Science. |
| (b) Philosophy. | (d) A third Language. |

PART II.—DETAILS OF SYLLABUS.

English.—In Calcutta and Bombay the examination comprises questions on the text-books and essay. In Madras the papers are on (1) text-books, (2) language, (3) essay, and (4) translation from the second language. In Allahabad papers are set on the text-books and unseen passages. The examination also includes translation from the vernacular, or essay for candidates whose vernacular is English. The Punjab examination includes reading, questions on the text-books, paraphrase or translation, and essay.

Second Language.—In Calcutta, Bombay and the Punjab the languages are classical or European; in Allahabad only classical; and in Madras classical, European, or Indian Vernacular. The papers are in all cases on the set text-books, on grammar and idiom, and on translation to and from the languages. In Madras the vernacular language examination includes essay writing.

Mathematics.—In Calcutta and the Punjab the papers are on Arithmetic, Algebra, Euclid, (Geometrical Conics) Trigonometry and Logarithms. In Madras they include only Algebra, Euclid and Trigonometry. In Bombay the subjects for the Previous Examination are Algebra and Euclid, and for the Intermediate Examination Trigonometry and Elementary Physics. The first course of Mathematics at Allahabad includes Arithmetic, Algebra and Euclid, and the second course Trigonometry and Geometrical Conics.

History.—In Calcutta and Madras the examination is confined to the outlines of Grecian and Roman, and in Bombay Grecian or Roman History. In Allahabad the course includes English and either Grecian and Roman or the British period of Indian History. In the Punjab there is one paper on general history and one paper on the History of Greece and Rome.

Philosophy.—Deductive Logic is an elective subject at Calcutta and Allahabad, and a compulsory subject in the Intermediate Examination at Bombay. Deductive Logic with the elements of Psychology is an elective subject in the Punjab.

Science.—At Calcutta elementary Physics and Chemistry are compulsory, and Physiology or Sanitary Science may be taken as an optional subject which does not count towards passing. At Madras Physiology or Physiography is compulsory. At Bombay Physics is a compulsory subject for the Intermediate Examination. At Allahabad Physics and Chemistry form an elective subject. In the Punjab any one of the following branches of Science may be taken as the elective subject: Physics and Chemistry, Zoology and Comparative Physiology, Botany, Geology. One-third of the marks in each is given for practical work.

PART III.—MARKS.

Calcutta.—The following statement shows the maximum and pass marks in each subject :—

	Maximum Marks.	Pass Marks.
English	150	45 or 30 per cent.
Mathematics	120	30 or 25 "
Second Language	120	30 " "
Science	120	30 " "
History or Logic	60	15 " "
TOTAL	570	150

In order to pass candidates must also obtain an aggregate of 160 marks or 28 per cent. or the maximum. Sixty marks are given for each optional subject which count towards the

position of the candidate on the list. For a place in the second class, the candidate must gain 257 marks or 41 per cent. on the maximum of 630, and for a place in the first class 342 or 54 per cent.

Madras.—The maximum marks are as follows :—

English	.	.	.	.	.	.	.	.	.	.	200
Second Language	.	.	.	.	.	.	.	.	.	.	100
Mathematics	.	.	.	.	.	.	.	.	.	.	150
Science	.	.	.	.	.	.	.	.	.	.	75
History	.	.	.	.	.	.	.	.	.	.	75
											TOTAL
											600

In order to pass candidates must gain 35 per cent. in each language, 30 per cent. in two and 20 per cent. in one of the three remaining subjects, and 35 per cent. in the aggregate. 50 per cent. places the candidate in the first class.

Bombay.—Maximum marks are not shown in the calendar. Pass marks are 30 per cent. in each paper, provided that if the candidate gets a less per centage in one paper but not less than 45 per cent. in the aggregate he may on certain conditions be allowed to pass. Candidates who secure 45 per cent. are placed in the second and 60 per cent. in the first class.

Allahabad.—Maximum marks are as follows:—

[illegible]

The total for each group is thus 200 and for the whole examination 600. Qualifying marks are as follows :—

240 or 60 per cent., First Division.

180 or 45 per cent., Second Division.

132 or 33 per cent., Third Division.

Punjab.—Maximum marks are as follows:—

English	150
(of which 10 for the oral examination).	
Classical Language	150
Persian, French, or German	120
Mathematics	150
History	120
Philosophy	120
Physical Science	150
(of which 50 for the oral and practical examination).	

Or arranging according to the divisions of the examination :—

English	.	.	.	.	.	.	150
Second Language	.	.	.	.	.	.	150 or 120
Mathematics	.	.	.	.	.	.	150
Fourth subject	.	.	.	.	.	.	120 or 150

The grand total being thus 570, or 30 more or less according to the subject chosen.

To pass, the candidate must secure 33 per cent. in each language, 25 per cent. in the other subjects and 33 per cent. in the aggregate. For a place in the second class 240 marks (giving 42 per cent. on 570) are required and for a place in the first class 340 marks (giving 60 per cent.).

B. A. EXAMINATION.

PART I.—SUBJECTS.

Calcutta.—There are two alternative courses, one of a more literary and the other of a more scientific character. The subjects in each are as follows:—

A COURSE.

1. English.
2. Philosophy.
3. One of the following :—
 - (a) Classical Language.
 - (b) History.
 - (c) Mathematics.

B COURSE.

1. English.
2. Mathematics.
3. One of the following :—
 - (a) Physical Science.
 - (b) Biology.
 - (c) Geology.

Madras—

1. English.
2. A Classical, European, or Indian Vernacular Language.

3. One of the following :—

- (a) Mathematics.
- (b) Physical Science.
- (c) Natural Science.
- (d) Philosophy.
- (e) History.

Bombay—

- 1. English.
- 2. Classical Language.
- 3. History.
- 4. One of the following :—
 - (a) Language and Literature.
 - (b) Philosophy.
 - (c) Mathematics.
 - (d) Physical Science.
 - (e) Natural Science.
 - (f) Roman History, Law and General Jurisprudence.

Allahabad.—The subjects are divided into three groups :

Group 1.—English.

Group 2.—Philosophy, Political Economy with Political Science, Mathematics and Physics.

Group 3.—History, a Classical Language, and Chemistry.

Candidates must take up (a) group 1, (b) one subject in group 2, and (c) a subject in either group 2 or group 3.

Punjab.—There are, as in Calcutta, two courses in one of which the second subject is literary and in the other scientific :—

A COURSE.

- 1. English.
- 2. A Classical Language.
- 3. One of the following :—
 - (a) A course of Mathematics.
 - (b) History.
 - (c) Philosophy.
 - (d) Physical or Natural Science.
 - (e) A Second Classical Language.

B COURSE.

- 1. English.
- 2. A course of Mathematics or a branch of Physical or Natural Science.
- 3. One of the following :—
 - (a) A course or a second course of Mathematics.
 - (b) A branch or a second branch of Physical or Natural Science.
 - (c) Philosophy.
 - (d) History.
 - (e) A Classical Language.

To sum up. English is everywhere compulsory. In Madras a classical or vernacular language, and in Bombay a classical language and history, are also compulsory ; whilst for the remaining subject a wide range is given. In Calcutta, Allahabad and the Punjab greater latitude is allowed, and, English apart, the candidate may at his option follow a course which is wholly literary or scientific or partly the one and partly the other.

PART II.

ANALYSIS OF THE SYLLABUS.

*English.**Calcutta—*

First paper : Text-books, poetry.

Second paper : Text-books, prose, and essay.

Prescribed subjects*—

Poetry : Two plays of Shakespeare.

Two books of Paradise Lost.

A selection of Tennyson's lyrical poems

Prose : Burke, two speeches and a letter.

Pattison, Life of Milton.

* In this and all other cases by 'prescribed subjects' is meant those set in the particular year taken for the illustration.

Madras—

First paper : Text-books, poetry.

Second paper : Text-books, prose.

Third paper : English language and literature.

Fourth paper : Essay.

Fifth paper : Translation into English from the candidate's selected classical or vernacular language.

Prescribed subjects :

Poetry : Selections from the works of Chaucer, Shakespeare, Milton and Tennyson.

Prose : Selections from the works of Austen, Thackeray and Oliver Wendell Holmes.

Bombay—

First paper : Text-books, poetry and prose.

Second paper : Essay.

Prescribed subjects : Two plays of Shakespeare.

Selections from the works of Bacon.

For the elective subject 'Language and Literature' :

First paper : Given period of English Literature.

Second paper : Prescribed works of the period.

Subjects prescribed :

Selections from the works of Pope and Dryden.

Allahabad—*

First paper : Prose, $\frac{3}{4}$ marks text-books and $\frac{1}{4}$ marks unseen.

Second paper : Poetry, $\frac{3}{4}$ marks text-books and $\frac{1}{4}$ marks unseen.

Third paper : Essay on some subject of the course.

Viva voce.

Subjects prescribed :

Poetry : Shakespeare, 3 plays.

Milton, 2 books, Paradise Lost.

Keats, selected portions.

Tennyson, the Last Tournament, Guinevere.

Prose : Carlyle, Hero Worship.

Newman, Idea of a University, V, VI, VII ;

George Eliot, Silas Marner ;

also : Shakespeare Primer (Dowden), Shakespeare Grammar (Abbott), Literary History of the periods of Shakespeare and Milton as in Shaw's Manual or other similar book.

Punjab —

First paper : Text-books, poetry.

Second paper : Text-books, prose, and essay.

Subjects prescribed :

Poetry : Shakespeare, 2 plays ;

Tennyson, Princess, Holy Grail, Lance'ot and Elaine.

Prose : Helps, Friends in Council, First series.

Kingsley, Westward Ho.

Steele, Essays from the Tatler.

Rosebery, Life of Pitt.

Macaulay, Boswell's Life of Johnson.

Ruskin, Sesame and Lilies, Crown of Wild Olives.

Second Language.

The following languages are common to the examinations at all the Universities : Greek, Latin, Sanskrit, Hebrew, Arabic, and Persian. In Calcutta Pali is another alternative language. In Madras there is a wider selection and instead of a classical language the candidate may take up an Indian vernacular or French or German. In Bombay there are two additional alternative branches : Avesta and Pahlavi, and French.

The nature of the examination is much the same in each case. The main portion consists of the translation of passages from set prose and poetical works with grammatical and other

I give the regulations as they now stand ; a revision has been effected which has not yet come into effect.

questions on the passages and on the set works generally. Candidates are also required to translate unseen passages both from and into the languages. In Madras a portion of one paper is devoted to general questions on grammar, structure and idiom ; and the writing of an essay is included in the examination in vernacular languages. In the Punjab Examination for 1901 an essay is included in the Persian Examination.

As an example of the set subjects those prescribed in Latin may be taken : —

Calcutta.—Livy, Books I and II.

Horace, Odes, Books III and IV.

Cicero, Pro Murena.

Madras.—Virgil, Georgics, Book IV.

Juvenal, Satires, VIII and X.

Cicero, Tusculan Disputation, Book I.

Tacitus, Annals, Book XII.

Bombay.—Horace, Satires.

Pliny, Letters, Books I, II, III.

For the elective subject " Language and Literature "—

Horace, Odes, Books III and IV.

Tacitus, Annals, Book III.

Allahabad.—Horace, Epistles, I and II, and Ars Poetica.

Cicero, De Oratore, Book I.

Tacitus, Annals, Book I.

Punjab.—Tacitus, Germanicus.

Cicero, Pro Archia and Pro Milone.

Virgil, Georgics, Books I and II.

Horace, Odes, Books I and II, and Ars Poetica.

Philosophy.

Calcutta.—Psychology, Logic and Ethics. Two papers in all. Several alternative text-books prescribed for each subject.

Madras.—Physiology, Psychology and General Philosophy, Logic and Ethics. Six papers. General text-books not prescribed, but certain advanced books are set, *e.g.*, a portion of Kant's *Metaphysics of Ethics*.

Bombay.—Logic and Moral Philosophy, four papers. Text-books :

Mill's Logic, Books I—IV.

Wallace's Kant.

Martineau's Types of Ethical Theory (portions).

Aristotle's *Nicomachean Ethics*.

Allahabad.—Prescribed Text-books on Psychology and Ethics. Two papers on each.

Punjab.—First paper :—Psychology.

Second paper { Ethics and
Inductive Logic or
Natural Theology.

Text-books are prescribed. The Course appears to be somewhat more elementary than in the other Universities.

History.

Calcutta—

1. Gardiner's Students' History of England.

2. History of India.

Elphinstone, Hindu and Muhammadan periods.

Meadows Taylor, British period,

or History of Rome, Oman.

History of Greece, Shackburgh.

3. Fawcett's Manual of Political Economy.

Madras—

1. History of India.
2. History of Great Britain since the Conquest, with special reference to Constitution.
3. A period of the History of Europe.
4. Political Science—prescribed syllabus.
5. Political Economy—prescribed syllabus.
6. Two special subjects or works—
e.g., Goldwin Smith—United States,
 J. A. Doyle—History of America.

No text-books prescribed except a portion of the "Theory of the State" by K. Bluntschli number 4.

Bombay—

1. History of England, Political and Constitutional (Bright's or some similar Manual).
2. History of India, 16th Century to 1858 (Meadows Taylor).
3. Political Economy (Fawcett or some similar Manual and Adam Smith, Books III, IV, V).

Allahabad—

First paper, general :—

- Freeman, Sketch of European History.
 Bryce, Holy Roman Empire.
 Seeley, Growth of British Policy.
 Guizot, History of Civilization in Europe.

Second paper, one of two special periods :—

- (1) Administration of Warren Hastings (3 text-books).
- (2) The Crusades (3 text-books).

Here may also be noticed the elective Allahabad Course of "Political Economy and Political Science."

Political Economy :—

Walker and Price.

Political Science :—

- Seeley's Introduction.
 Bluntschli, Theory of the State (parts).
 Bagehot, English Constitution
 and Strachey's India (parts)
 or Aristotle's Politics.

Punjab—

1. General English History :—Gardiner's Students' History.
2. General Indian History :—R. C. Dutt's Ancient India.
 Marsham, History of India.
3. Special subjects :—*e.g.*, Seeley's Expansion of England and Stubbs' Early Plantagenets.
4. Political Economy :—Walker.

Mathematics.

* In this and other cases the course of mixed *Calcutta.*—Statics, Dynamics, Hydrostatics, mathematics does not require the use of the Differential and Descriptive Astronomy.
 ential and Integral Calculus.

Madras.—Pure Mathematics: Algebra including Indeterminate Equations of the first degree, Euclid, Geometrical Conics, Plane and the elements of Spherical Trigonometry, Theory of Equations, Analytical Geometry including the General Equation of the second degree, portions of Todhunter's Differential Calculus.

Mixed Mathematics: Statics, Dynamics, Hydrostatics, Geometrical Optics, and Astronomy.

Bombay.—First paper: Geometrical and Analytical Conic Sections.

Second paper: Elements of Differential and Integral Calculus.

Third paper: Statics and Dynamics.

Fourth paper: Hydrostatics and Optics.

Allahabad.—First paper: Analytical Geometry.

Second paper: Differential and Integral Calculus (portions of Williams and Edwards).

Third paper: Statistics and Dynamics (Hicks).

Punjab.—First course: Statics, Dynamics, and Hydrostatics.

Second course: Analytical Geometry (including the general equation of the second degree), Differential and the elements of Integral Calculus.

Physical Science.

In Calcutta and Bombay the examination includes Physics and Chemistry. In Madras the course consists of experimental Physics and Inorganic Chemistry and *either* Mixed Mathematics and more advanced Physics *or* more advanced Chemistry. In Allahabad the candidate may take up either Physics or Chemistry as one elective subject or Physics and Chemistry as two elective subjects. In the Punjab the candidate can be examined in either Physics or Chemistry, but not in both.

Physics.

Calcutta.—A prescribed syllabus comprising the following subjects: General Ideas (wave motion, potential, elasticity). Heat, Light, Frictional and Dynamical Electricity, Sound Magnetism. Text Book—Set portions of Ganot's Physics.

Madras.—Ordinary course, General, Acoustics, Heat, Magnetism, Electricity, Optics. The syllabus is prescribed in detail. Text-book: Balfour Stewart's Lessons on Elementary Physics.

Advanced course: A more advanced syllabus of the same subjects. Text-books: Ganot's Elementary Treatise on Physics and Deschanel's Natural Philosophy.

Bombay.—A prescribed syllabus of General Physics, Acoustics, Heat, Light, Electricity and Magnetism. No text-books. Two papers and a practical examination.

Allahabad.—A prescribed syllabus of General Properties of Matter, Sound, Heat, Light, Electricity, and Magnetism. A choice of 17 text-books is given. Two papers and a practical examination, which consists of selected experiments from Glazebrook and Shaw's Practical Physics.

Punjab.—A prescribed syllabus of General Physics, Sound, Heat, Light, Electricity and Magnetism. Two papers and a practical and oral examination. One practical and six theoretical text-books are recommended.

Chemistry.

Calcutta.—A prescribed syllabus of Inorganic Chemistry. No practical examination. Text-book: Newth.

Madras.—Ordinary course: A prescribed syllabus of Inorganic Chemistry, and a practical examination in the qualitative analysis of substances containing one metal and one acid. Three text-books.

Advanced course: A fuller course of Inorganic and a prescribed syllabus of Organic Chemistry. More advanced qualitative analysis including the analysis of organic substances. Text-books: Fowne's Manual of Chemistry and Valentin's Qualitative Analysis.

Bombay.—A prescribed syllabus of Inorganic Chemistry and a practical examination in the analysis of substances containing one metal and one acid. No text-books.

Allahabad.—A prescribed syllabus of Inorganic Chemistry and a practical examination in (a) the qualitative analysis of substances containing not more than two metals and two acids, and (b) the preparation of simple substances. A list is given of seven theoretical and five practical text-books.

Punjab.—A prescribed syllabus of Inorganic and Organic Chemistry. Three theoretical and a practical text-book. The practical examination consists of simple experiments and qualitative analysis as in the text-book.

Natural Science.

Calcutta.—(a) Physiology and either Botany or Zoology *or* (b) Geology and either Mineralogy or Physical Geography. Prescribed syllabus and text-books. No practical examination.

Madras.—General Biology and one of the following: Botany, Animal Physiology, Zoology, Geology including Mineralogy and Palaeontology. Two papers in General Biology and two papers and two practical examinations in each of the alternative subjects. Syllabus, but not text-books, prescribed.

Bombay.—Botany and Zoology. Prescribed course and recommended text-books.
Practical examination.

Allahabad.—Nil.

Punjab.—Any one of the following :—

Zoology and Comparative Physiology. Botany.

Animal Physiology.

Geology and Mineralogy.

Prescribed syllabus and recommended text-books.

Practical examination.

PART III.—MARKS.

Calcutta.—In each subject there are two papers marked 100 each. Three subjects are compulsory, and the maximum marks for the whole examination are therefore 600. The English marks are divided as follows :—Poetry subjects : 100 ; Prose subjects : 70 ; Essay : 30. In 1901 the 200 marks for History were distributed as follows :—English : 64 ; Indian or Roman and Grecian : 73 ; and Political Economy : 63. In Mathematics three-fifths of the marks are given for book-work and the remainder for simple problems. In order to pass, the candidates must obtain 60 marks or 30 per cent. in each subject, and (unless he takes Honours) 210 marks or 36 per cent. in the aggregate. There is no division into classes. In Honours a separate examination is held.

Madras—

Maximum marks—

Maximum marks—									
1. English	{	Set poetry and prose	.	.	.	.	.	.	120
		Language and literature	.	.	.	.	.	.	50
		Composition	.	.	.	.	.	.	40
		Translation	.	.	.	.	.	.	30
TOTAL								240	
2. Second Language	{	Classical	{	Text-books and grammar	.	.	.	60	
		Translation		.	.	.	60		
	TOTAL								120
	{	Vernacular	{	Text-books and grammar	.	.	.	50	
				Translation	.	.	.	40	
				Composition	.	.	.	30	
TOTAL								120	
3. Science—									
(i) Mathematics	{	Pure	.	.	.	.	.	.	230
		Mixed	.	.	.	.	.	.	190
TOTAL								420	
(ii) Physical Science	{	Physics	.	.	.	.	.	.	70
		Theoretical Chemistry	.	.	.	.	.	.	50
		Practical Chemistry	.	.	.	.	.	.	40
		Advanced course in Physics or Chemistry	.	.	.	.	.	.	240
TOTAL								400	
(iii) Natural Science	{	General Biology	.	.	.	.	.	.	120
		Paper in Botany or alternative subject	.	.	.	.	.	.	160
		Practical examination in ditto	.	.	.	.	.	.	120
TOTAL								400	
(iv) Mental and Moral Science	{	Physiology and Psychology	.	.	.	.	.	.	140
		Logic	.	.	.	.	.	.	120
		Ethics	.	.	.	.	.	.	140
TOTAL								400	
(v) History	{	History Proper	.	.	.	.	.	.	180
		Political Science and Political Economy	.	.	.	.	.	.	140
		Two special subjects	.	.	.	.	.	.	80
TOTAL								400	

Candidates are ranked for the English, Language and Science Divisions in separate lists in three classes : the first two in order of merit and the third in alphabetical order :—

For the 1st class the candidate must obtain not less than $\frac{7}{12}$ th marks.

„ 2nd class, ditto ditto $\frac{5}{12}$ th „

„ 3rd class, ditto ditto $\frac{1}{3}$ rd „

Candidates obtaining less than $\frac{1}{3}$ rd in any division fail to pass; in Science they must also obtain $\frac{1}{4}$ th marks in each branch of the subject.

Bombay—

Maximum Marks—						TOTAL.
1. English : Paper on set subjects	.	.	.	.	.	150
Composition	.	.	.	.	.	50
2. Language : One paper	.	.	.	.	.	100
2. History and Political Economy—						100
Three papers each	.	.	.	.	.	300
4. Each optional subject 400 as follows :	.	.	.	.	.	400
(a) Language and Literature—						
English : Two papers each	.	.	.	.	.	100
Classical Language : Two papers each	.	.	.	.	.	100
(b) Logic and Moral Philosophy—						
Four papers each	.	.	.	.	.	100
(c) Mathematics—						
Pure and Mixed, each two papers of	.	.	.	.	.	100
(d) Chemistry and Physics—						
Each two papers of 80 and a practical examination of	.	.	.	.	.	40
(e) Botany and Zoology. The same.	.	.	.	.	.
GRAND TOTAL						1,000

To pass, the candidate must obtain 30 per cent. in each subject, subject to the proviso that, if he obtains less in one subject, but not less than 45 per cent. in the aggregate, he may, on conditions, be passed. 60 per cent. in the aggregate or 600 marks places the candidate in the first, and 45 per cent. or 450 marks in the second, division.

Allahabad—

	Papers.	Total maximum marks.
Group I. English	3	150
Philosophy	2	100
Political Economy and Political Science	2	100
Group II. Mathematics	3	150
Physics	2 and a practical examination.	150 (50 for each paper and 50 for practical).
Group III. History	2	100
Classical Language	2	100
Chemistry	2 and a practical examination.	150 (50 for each paper and 50 for practical).

The maximum for the whole examination is 350, 400 or 450 according to the subjects taken. Qualifying marks are 60 per cent., first division, 40 per cent., second division, and $\frac{1}{3}$ rd, third division. The percentage is calculated on the maximum for the particular course selected by the candidate. Candidates gaining more than 75 per cent. are placed in an honours list.

Punjab—

Maximum marks—

English	Oral	10
	Poetry	60
	Prose and Essay	80
		150
Classical Language	Poetry	75
	Prose	40
	Translation from English	35
		150*
History and Political Economy.	History of England	40
	History of India	40
	Selected periods	30
	Political Economy	40
		150
Applied Mathematics		150
Pure Mathematics		150
Philosophy	Psychology	75
	Moral Science	40
	Inductive Logic or Natural Theology	35
		150
Physical Science	Two written papers	100
	Practical	50
		150
Natural Science	The same	150

* For Persian only 120.

As each student takes up three subjects, two obligatory and one elective, the total number of maximum marks is 450 or 420 if one of the subjects is Persian. Pass marks are 40 per cent. in each obligatory and 33 per cent. in the third or elective subject. In English and Science the same percentage must be obtained in the oral or practical examination. For a place in the first division the candidate must obtain 290 or 64·4 per cent. of the maximum, and for a place in the second division 190 or 42·2 per cent.

THE HONOURS EXAMINATION, CALCUTTA.

A student may be examined in honours instead of for a pass in any subject of the B.A. Degree Examination. For the Honours Examination four special papers are substituted for the two set to the ordinary candidates. One hundred marks are given for each paper except in Chemistry, in which subject 50 is given for the paper and 50 for the practical examination. The maximum number of marks in each subject is 400. Pass marks are 160 or 40 per cent., whilst 240 marks or 60 per cent. place the candidate in the first Honours Division.

The following is an outline of the Honours Course. The subjects named are those for the year 1912:—

1. *English*.—Pass subjects and in addition set portions of Spencer, Mathew Arnold and Bacon. Also Earle's Philology of the English Tongue, and Arnold's Manual of English Literature. Three hundred marks are given for the set subjects, 50 for Philology and Literature and 50 for an essay.

2. *Classical Language*.—In addition to the pass subjects, a second course of reading and comparative grammar. As an instance, the additional subjects in Latin are set portions from Virgil, Tacitus and Terence and Peile's Primer of Philology.

3. *Philosophy*.—The pass course and Natural Theology and the History of Philosophy.

4. *History, Political Economy and Political Philosophy*.—

English History.—Students' History of England, Gardiner.

Portion of Green's Short History of the English People.

Bagshot, The English Constitution.

Indian History.—Elphinston, Hindu and Muhammadan Periods.

Meadows Taylor, British Period.

Greece and Rome.—Oman and Shockburgh.

Political Economy.—Fawcett and Marshall.

Political Philosophy.—Mill on Representative Government.

5. *Mathematics*.—Pass subjects and Analytical Plane Geometry including the general equation of the second degree. Differential Calculus including curve tracing. Elements of Integral Calculus.

6. *Physics and Chemistry*.—The Physics course comprises, in addition to the pass subject, an elementary knowledge of thermodynamics, and a more advanced course in light. The Chemistry papers require a fuller knowledge of inorganic and some acquaintance with organic chemistry. There is a practical examination in the qualitative analysis of inorganic substances containing not more than two metals and two acids.

6. *Biology*.—A fuller course of physiology, botany and zoology.

7. *Geology*.—A fuller course of geology, physical geography and mineralogy.

In each branch of science the examination includes questions on the Doctrine of Scientific Method.

M.A. DEGREE.

PART I.—SUBJECTS AND DETAILS OF SYLLABUS.

The subjects are everywhere the same, and consist of the following:

1. Languages.

2. History.

3. Philosophy.

4. Mathematics.

5. Natural * or Physical Science.

In Calcutta and the Punjab the candidates may take up one or more of the above subjects; in Bombay and Allahabad only one; in Madras one or more, but not more than one in a year.

LANGUAGES.

Calcutta.—English (for those whose vernacular is not English) or a classical language.

In both cases the examination includes papers on a number of text-books, questions on comparative grammar, and an essay in English on a subject connected with the history or literature of the language. The examination in English includes Anglo-Saxon grammar and one paper on general literature. The classical language examination includes translation from and into English.

* Natural Science is not included in the Allahabad course.

Madras.—English or a classical language or one of two groups of vernacular languages (Persian and Hindustani or the Dravidian languages). The examination includes (i) principles of comparative philology, (ii) growth and history of the language, (iii) history of the literature, (iv) prescribed text-books, (v) essay, and (vi) translation into and from the selected language.

Bombay.—English with one or more classical or European or Indian vernacular languages. Two papers on English text-books including points of scholarship, comparative philology, criticism and the history of literature. Two papers on the same lines for the second language. Translation into and from the second language. Original composition in English in prose or verse.

Allahabad.—English or a classical language. The examination includes questions on the text-books and on the language, literature, and history of the country. The examination in the classical language also includes translation into and from English. The examination in English includes questions on unseen passages and an essay.

Punjab.—English or a classical language. The examination includes questions on text-books and on comparative grammar. The examination in English includes translation into and from the vernacular, or for an English student a paper on English literature of the 19th century. Questions are also put on the history of the English language and literature. The examination in classical language includes translation into and from English.

HISTORY.

Calcutta—

1. History of England.
2. Constitutional History of England.
3. Selected period of History.
4. Political Philosophy, General Jurisprudence, International Law.
5. Political Economy and Economic History.
6. Essay.

Madras—

- | | | |
|--|---|--|
| 1. Ancient | } | History, a selected period or subject. |
| 2. Mediaeval | | |
| 3. Modern | | |
| 4. Indian | | |
| 5. A special subject or institution to be studied in detail. | | |
| 6. Some science auxiliary to History. | | |
| 7. The principles of International Law. | | |
| 8. Political Economy. | | |
| 9. Essay. | | |

Bombay—

1. A special period of English History.
2. The Constitutional History of England.
3. Economic History of England and Political Essay.
4. Special period of Indian History.
5. Some period of Modern or Mediaeval History.
6. Comparative Politics.

Allahabad—

1. Political Philosophy.
2. Political Economy.
3. Constitutional and Economic History.
4. Mahammadan and Mahratta or Roman History.
5. Work of an eminent Historian or Greek History.
6. A special subject or an original Thesis.

Punjab—

1. History of England.
2. Constitutional History of England.
3. Selected period of European History.
4. Political Philosophy.
5. Political Economy.
6. Essay.

PHILOSOPHY.

Calcutta.—Psychology, Logic, Ethics and Natural Theology more fully than in the B. A. course. Political Philosophy. History of European Philosophy (general and special).

Madras.—A minute acquaintance with the whole B. A. course, omitting selected historical subjects, together with additional prescribed subjects. History of Philosophy; selected authors or works. The candidate is required to send an original dissertation with his application.

Bombay.—1. Historical development of Greek philosophy.

2. " " of modern "
3. Selected works of either Plato, Aristotle, Lock or Kant.
4. Moral Philosophy or Natural Theology.
5. Psychology.
6. Essay.

Allahabad.—Selected works of Plato, Aristotle, Kant, Berkeley, Hume, also : Green, Prolegomena to Ethics; Seth, Scottish Philosophy; Ward, Psychology; Sigwart, Logic; Weber, History of Philosophy.

Punjab.—Prescribed works on Logic, Psychology, Ethics, History of Philosophy and Natural Theology. Also an Essay.

MATHEMATICS.

Calcutta.—Two courses, in one of which the principal subject is pure and in the other mixed mathematics. The first course includes subjects up to Spherical Trigonometry, Theory of Equations and Differential Equations. The second course includes subjects up to Rigid Dynamics and Hydromechanics.

Madras.—The course comprises pure and mixed mathematics and includes advanced subjects such as Spherical Trigonometry, Theory of Equations, Differential Equations, Advanced Dynamics and Hydromechanics.

Bombay.—A somewhat less advanced course not including Spherical Trigonometry or Rigid Dynamics.

Allahabad.—The examination is the same as the first and second parts of the D. Sc. examinations, which are taken one and two years respectively after the B. Sc. examination. The first D. Sc. examination contains two mathematical papers, the subjects being Solid Geometry, elementary Differential Equations, Dynamics of a Particle and Rigid Dynamics in two dimensions. The second D. Sc. Examination is wider and more advanced. Among the subjects are Theory of Functions, Rigid Dynamics, Differential Equations and Co-ordinate Geometry of three dimensions.

Punjab.—The examination is in pure and mixed mathematics, and includes subjects such as Theory of Equations, Differential Equations, Spherical Trigonometry, and Rigid Dynamics in two dimensions.

SCIENCE.

Calcutta.—One of the following :—

1. Chemistry. Inorganic and Organic, Qualitative analysis of complex inorganic substances and the principles of quantitative analysis.
2. Heat, Electricity and Magnetism as principal subjects with Light and Sound as subsidiary subject. Experimental and Mathematical.
3. The same subjects with the order of importance reversed.
4. Botany, including the following :—
 - (a) General and Special Morphology and Physiology.
 - (b) Systematic Botany.
 - (c) Palæobotany.
 - (d) Practical knowledge of indigenous Indian plants and identification of specimens.
5. Physiology and Zoology including—
 - (a) Comparative Anatomy and Physiology.
 - (b) Distribution.
 - (c) Evolution.
6. Geology and Mineralogy, including—
 - (a) Stratigraphical Geology.
 - (b) Palæontology.
 - (c) Mineralogy.
 - (d) Crystallography.
 - (e) Elementary Inorganic Chemistry.

Madras.—One of the following :—

1. Physics, including the following :—
 - (a) Physics, Theoretical and Practical (Standard of the London B. Sc. Honours Degree).
 - (b) Mixed Mathematics.
 - (c) Inorganic Chemistry (theoretical and practical).
 - (d) Scientific Method.
2. Chemistry, including the following :—
 - (a) Organic and Inorganic Chemistry. Qualitative, Quantitative and Spectroscopic Analysis.
 - (b) Physics.
 - (c) Mineralogy.
 - (d) Scientific Method.
3. Botany.
4. Physiology.
5. Zoology.
6. Geology, including—
 - (a) Theoretical, Dynamical, Stratigraphical and Physiographical, Geology.
 - (b) General Petrology and *either* Crystallography and Mineralogy *or* Palæozoology and Palæobotany.

In subjects 3-6 the candidate's application must be accompanied by an original dissertation.

Bombay.—Either Physics, Chemistry or Natural Science.

1. Physics.—The examination is divided into the following parts :—
 - (a) General Physics and Sound.
 - (b) Heat.
 - (c) Light.
 - (d) Electricity and Magnetism.
 - (e) Practical work on (a) and (b).
 - (f) Practical work on (c) and (d).
2. Chemistry.—Physical, Inorganic and Organic. Qualitative and Quantitative Analysis.
3. Natural Science—
 - (a) Zoology.
 - (b) Botany.
 - (c) *Either* Physical Geography and Geology *or* Animal Physiology.

There are two papers and a practical examination in each subject.

Allahabad.—No examination is held in Natural Science. Candidates may take up the course in either Physics or Chemistry of the first and second parts of the D.Sc. degree. The subjects of examination are as follows :—

1. Physics.—First D.Sc. examination. Properties of Matter, Heat, Sound. Theoretical and practical, including quantitative demonstration.
 Second D.Sc. examination. Light, Magnetism and Electricity. Theoretical and Practical as above.
2. Chemistry. First D.Sc. Examination—
 - Inorganic.
 - Organic.
 - Theoretical and Historical.
 - Qualitative and Quantitative analysis of inorganic substances.
 Second D.Sc. Examination.
 - Advanced Inorganic and General.
 - Organic.
 - Theoretical and Historical.
 - Qualitative and Quantitative analysis with organic analysis and preparations involving no special difficulty.

Punjab.—Any one of the following :—

1. Physics :
 - (a) Mathematics.
 - (b) Sound.
 - (c) Heat.
 - (d) Light.
 - (e) Electricity.
 - (f) Practical work.

2. Chemistry : Inorganic, Organic, Atomic Theory.

Practical : Inorganic : Complex qualitative and principles of quantitative analysis.

Organic : Principles of ultimate analysis, recognition of common substances, and proximate analysis of mixtures.

3. Zoology, Comparative Anatomy and Physiology.

4. Botany, including Physiology, Palæontology, and a knowledge of Indian plants.

5. Geology, Palæontology and Mineralogy.

The examination in each branch of science includes a practical test.

PART II.—MARKS.

Calcutta.—There are six papers in each subject, a practical examination in any branch of science counting as a paper. 100 marks are assigned to each paper.

In Languages, History and Philosophy pass marks are 33 per cent. in each paper and 40 per cent. in the aggregate. Candidates obtaining 48 per cent. are placed in the second, and 60 per cent. in the first class. In Mathematics and Science a minimum is not prescribed for each paper. Candidates must obtain 33 per cent. in the aggregate for a third class, 45 per cent. for a second class and 60 per cent. for a first class.

Madras.—The maximum marks in each subject except Mathematics are 1,400. In Mathematics 1,400 marks are given for book work and 300 for problems; the marks in both book work and problems count towards the pass percentage, and that percentage is calculated on an aggregate of 1,500 marks. The marks in each subject are distributed in the following manner :—

Mathematics : Equally divided between the pure and mixed branches.

Physics : 1,000 theoretical, 400 practical.

Chemistry : 950 theoretical, 450 practical.

Botany, Physiology and Zoology : 450 practical, 200 dissertation, 750 papers.

Geology : 400 practical, 200 dissertation, 800 papers.

Philosophy, History and Language : Dissertation 240, papers 1,160.

Bombay.—Six papers are set in Languages, History, Philosophy and Mathematics. There are four papers and two practical examinations in Physics, three papers and three practical examinations in Chemistry, and six papers and three practical examinations in Natural Science. The maximum number of marks in each subject is not shown in the calendar. In order to pass, candidates must obtain one-fourth marks in each paper and practical examination and one-third marks in the aggregate. Forty-five per cent. in the aggregate places a candidate in the second, and 60 per cent. in the first division.

Allahabad.—Eight papers are set in English, four in languages and philosophy, and six in history. One hundred marks are given for each paper, and one hundred for the viva-voce examination which is held in each subject. Qualifying marks are : First Division, 60 per cent. ; Second Division, 40 per cent. ; and Third Division, one-third.

Punjab.—Six papers are set in Languages, Mathematics and History. There are five papers and a practical examination in Physics and six papers and a practical examination in Chemistry. Pass marks are 33 per cent. in each paper (40 per cent. in the composition paper in the language examination) and 50 per cent. in the aggregate. For the first class the percentage is 80 and for the second class 65.

R. NATHAN.

11th February 1902.

AFFILIATED COLLEGES AND RECOGNIZED SCHOOLS.

CALCUTTA UNIVERSITY.

Affiliated Colleges.

There are 80.

They are affiliated up to the following standards :—

- 22 B.A.
- 20 B.A. and B.L.
- 1 B.A. and B. Sc.
- 2 B.A. and B.L. and B.Sc. (Presidency and Patna).
- 1 B.Sc. (Indian Association for the cultivation of Science).
- 31 F.A.
- 1 in Medicine.
- 2 in Engineering.

51 (including Cuch Behar and Chandernagore) are in Bengal and 29 outside Bengal.

Those outside Bengal are situated as follows :—

	1st grade.	2nd grade.	Total.
Ceylon	4	5*	9
North-Western Provinces	4†	2	6
Central Provinces	3	1	4
Rajputana	2	...	2
Burma	1	1	2
Central India	1	2	3
Punjab	1	1	2
Assam . . . . .	...	1	1
	16	13	29
	=	=	=

* One of these, Jaffna Central College, is also affiliated to the Madras University.

† One Engineering.

Three of the above, namely Muhammadan College, Aligarh ; Morris College, Nagpur ; and Rangoon College are affiliated up to the B. L. as well as up to the B.A. standard.

The following are details of the outside Colleges :—

North-Western Provinces—

- First grade . (a) St. John's College, Agra, mainly for Native Christians, 1862.
Jaynarayan's College, Benares, 1862.
(a) Muhammadan College, Aligarh, 1881.
- Second grade . (a) St. Peter's College, Agra, Roman Catholic, 1870.
(a) St. George's College, Mussoorie, 1882.
- Engineering . (a) (b) Rurki College.

Central Provinces—

- First grade . (a) Jabalpur College, 1860.
Morris College, 1885, Nagpur.
Free Church Institution, Nagpur, 1886.
- Second grade . St. Francis deSale's School, Nagpur, 1879.

Punjab—

- First grade . Bishop Cotton School, Simla, 1866.
- Second grade . Baring High School, Batala, 1880.

(a) Also affiliated to the Allahabad University.

(b) The Allahabad University does not at present give degrees in Engineering.

Rajputana—

First grade . Canadian Mission College, Indore, 1893.
(a) Jeypore Maharaja's College, 1896.

Central India—

First grade . New Holker College, 1891.
Second grade . Residency College, Indore, 1877.
Rutlam Central College, 1884.

Taking the Arts Colleges only we have—

B. A. 45, of which 30 in Bengal.
F. A. 31, of which 18 in Bengal.

This gives 48 in Bengal or deducting Chandernagore and Cuch Behar 46. The last Bengal Education Report gives only 44. These were distributed as follows: 11 Government, 1 Municipal, 7 aided and 25 unaided.

Recognized Schools.

There are 671 distributed as follows:—

Bengal	512	Central Provinces	16
Assam	26	Central India and Rajputana	16
Burma	22	Cashmere	2
North-Western Provinces	21	Nepal	1
Punjab	45	Ceylon	10

MADRAS UNIVERSITY.*Affiliated Colleges.*

There are 61—

B.A.	15	of which	2 Mysore. 1 Hyderabad. 1 Travancore.
F.A.	40	of which	1 Mysore. 1 Hyderabad. 1 Cochin. 1 Pudukotai. 4 Travancore. 1 Ceylon.
B.L.	2	Medicine	1
L.T.	2	Engineering	1

The last Education Report shows the following number of affiliated Colleges in the Province of Madras:—

B.A.	11	3 Government. 6 Missionary } aided; 1 Native } 1 unaided—maintained by the Maharaja of Vizianagram.
F.A.	30	1 Government. 3 Municipal. 17 European Missionary. 9 Native management.

Only two of these are unaided.

*Recognized Schools.**In British India—*

Boys 153 Girls 21

In Native States—

Mysore 19 Coorg 2
Hyderabad 14 Pudukota 1
Cochin 5 Travancore 17

Also one in Pondicherry.

Grand Total 213

(a) Also affiliated to the Allahabad University.

BOMBAY UNIVERSITY.

Affiliated Colleges.

Thirteen, all situated in the Bombay Presidency, 5 of them being in Native States. They are affiliated up to the following standards :—

- 2 B.A., B.Sc. and first LL.B.
- 4 B.A., B.Sc.
- 2 B.A. and first LL.B.
- 1 B.A., B.Sc., L.Ag. and first LL.B.—(Baroda College).
- 1 Primary and Intermediate in Arts.
- 1 LL.B.—Government Law School, Bombay.
- 1 Medicine and B.Sc.—(Grant Medical College).
- 1 Engineering and B.Sc.—(Poona College of Science).

There is no recognition of schools.

ALLAHABAD UNIVERSITY.

Affiliated Colleges.

There are 31 as follows :—

M.A., LL.B., D.Sc.	.	.	.	.	1	Muir Central College.
M.A., LL.B., B.Sc.	.	.	.	.	3	
M.A., LL.B.	.	.	.	.	2	
M.A.	.	.	.	.	1	Maharaja's College, Jeypore.
B.A., LL.B., B.Sc.	.	.	.	.	1	Jabalpur.
B.A., LL.B.	.	.	.	.	3	
B.A.	.	.	.	.	6	
Intermediate Examination	.	.	.	.	13	
Engineering	.	.	.	.	1	Rurki.

Of the 31, 25 are in the North-Western Provinces and 6 outside—

3 Rajputana	.	.	.	.	.	{	Maharaja's College, Jeypore.
						{	Government College, Ajmere.
						{	Jaswant College, Jodhpur.
2 Central India	.	.	.	.	.	{	Madhan College, Ujjain.
						{	Lashkar College, Gwalior.
1 Central Provinces	.	.	.	.	.		Government College, Jabalpur.

The Education Report gives 24 (probably excluding Rurki) distributed as follows :—

State	.	.	.	.	.	.	.	.	.	3
Aided	.	.	.	.	.	.	.	.	.	7
Unaided	.	.	.	.	.	.	.	.	.	14

Seven are also affiliated to Calcutta, 5 within and two without the Province—

5 within	{	Muhammadan College, Aligarh.
	{	St. John's College, Agra.
	{	St. George's College, Mussoorie.
	{	St. Peter's College, Agra.
	{	Rurki* Engineering College.
2 without	{	Maharaja's College, Jeypore.
	{	Government College, Jabalpur.

Recognized Schools.

54, of which 9 are in the Central Provinces, 3 in Rajputana, and 2 in Central India.

PUNJAB UNIVERSITY.

Recognized Colleges.

There are no affiliated Colleges in the Punjab. The question of framing rules of affiliation was under consideration at the close of the year 1900-1901.

The Arts Examination is open to private and college students. A college student is a student whose name has been borne on the rolls of any college recognized by the University for the purpose of the regulations, during ten out of the twelve months preceding the examination.

The College Directory in the University Calendar shows 12 Arts Colleges in British India and 3 in Native States—Patiala, Bhawalpur and Kapurthala. Five of these Colleges teach only up to the Intermediate Standard. In addition to the Arts Colleges there are the Oriental College and the Law School both under the immediate management of the University and the Government Medical College.

* No Engineering degrees are given by the Allahabad University.

Recognized Schools.

There is no list of recognized schools. The Entrance Examination in Arts is open to private students and public school boys. A public school boy is a student whose name has been borne on the rolls of any public school during nine out of the twelve months preceding the examination. A public school means a school (a) in which the course of study conforms with the standard prescribed by the Department of Public Instruction or the University, and which is inspected by the Department; or (b) which satisfies the University that it is organized and conducted so as to ensure efficient training up to the standard of the Entrance Examination.

B. NATHAN,—30-1-02.



LEGAL EDUCATION IN INDIA.

In prescribing the establishment of Universities in India the Court of Directors, in paragraph 30 of their Despatch of the 19th July 1854, made special mention of the subject of law, and alluded to it as the most important of those branches of learning with regard to which facilities did not exist for the acquisition of a high degree of knowledge, and for which professorships might therefore be instituted. The Acts of Incorporation accordingly empowered the Universities to grant degrees in law and arrangements were made by the Government of India and the Governments of Madras and Bombay to provide instruction in law of a University character.

2. For the purpose of securing general uniformity a single committee was appointed to consider, for the three Universities which it was proposed to establish, the scope and standard of the examinations and the preliminary conditions which candidates should be required to fulfill. The committee received the general instruction to base their recommendations on the regulations of the London University. The law sub-committee found it impossible to follow closely the London model, for they had to take into account the systems of Muhammadan and Hindu Law, the enactments of the Indian legislatures, and the procedure and practice of the Indian Courts. They felt their difficulties to be enhanced by the absence of any system of higher legal training. The subjects and standards of the examinations, the preliminary course of study, and the qualifications in general knowledge to be required from the candidates, all formed the subject of discussion. Finally the following general scheme was submitted by the sub-committee and accepted by the general committee and the Governor General in Council. The

* Higher degrees were introduced under the Universities to grant the degree of Bachelor of powers conferred by the amending Act XLVII Law * (B. L.). Candidates to be admitted to the of 1860.

degree examination after one year from the date of obtaining a degree in Arts, and after attending lectures in a recognized school for three years. An examination in Honours to be held shortly after the Degree Examination, the number of marks gained in both examinations being taken into account in classing the Honours candidates. The subjects for the Degree Examination to be: first the general principles of Jurisprudence, second, the several systems of Municipal Law which obtain in India—"firstly, as it concerns personal rights and status; secondly, as it concerns property, including of course, the general nature and various kinds of property, the different modes of acquiring it, and herein the Law of Contracts, and the Law of Succession, whether testamentary or *ab-intestato*; thirdly, as it concerns the sanction of rights, or the remedies for wrongs, and herein the general principles of procedure, the Law of Evidence, and the Criminal Law." The subjects for the Honours Examination to be: (1) the law as administered by the Courts of the East India Company, including Hindu and Muhammadan Law and the law of immovable property in the Mofussil; (2) the law as administered by the Supreme Courts, including those parts of the Hindu and Muhammadan Law there administered and the English Law of real property; (3) Mercantile Law; (4) Roman Civil Law, International Law, and the conflict of laws. While laying down these instructions for general guidance, and with special reference to Calcutta, the sub-committee considered that it would be unwise to fetter the discretion of the several Universities with regard to the subjects of examination. They remarked that the examination must be influenced by the course of study followed in the different Presidencies, and they recommended that the Senates should be permitted to frame their own tests.

3. The original scheme has from time to time been modified by the several Universities, and the regulations governing the scope and standard of the examinations and the preliminary conditions which candidates must fulfill, are no longer uniform and differ in many respects. Systems of legal education have also grown up. In the Government College which is the principal Government College in the North-Western Provinces there is no

With these preliminary remarks we may proceed to the consideration of the arrangements obtaining in the several Provinces and Universities.

4. *Bengal*.—The Calcutta University gives the degrees of Bachelor of Law (B. L.) and Doctor of Law (D. L.) and also holds an Honour's Examination. There is only one examination for the B. L. degree. Candidates must after passing the B.A. Examination have studied not less than two years in an institution affiliated in law, and must have attended at least 24 out of the minimum number of 36 lectures in each of the prescribed eight courses of study. The following are the prescribed courses:—

1. The Principles of Jurisprudence; the History and Constitution of the Courts of Law and legislative authorities in India.
2. The Law relating to persons in their public and private capacities, including the law of Testamentary Succession.
3. The Law of Property, including the law relating to Land Tenures and the Revenue Laws.
4. The Law of Property, including the Laws of Transfer, Prescription and Pre-emption.
5. The Law of Contracts and Torts.
6. The Law of Crimes and Criminal Procedure.
7. The Law of Civil Procedure, including the Law of Evidence and the Law of Limitation.
8. The Hindu Law and the Muhammadan Law (with the exception of parts already included), and the Law of Intestate Succession.

Formerly the whole course extended over three years, and students might attend law lectures originally for two years and later for one year before passing the B. A. Examination. The present system was introduced during the quinquennial period 1887-88 to 1891-92. The successful candidates are arranged in order of merit in two classes. In order to pass the examination a candidate must obtain 33 per cent. in each of the eight papers, with two-thirds of the total marks for a first and one-half for a second class. Any candidate who has passed the B. L. Examination may present himself at the examination for Honours in Law. In order to pass he must obtain 60 per cent. of the marks in each paper. There is no examination for the degree of D. L. The candidate must be a B. L. who has passed the Honours Examination, must have practised his profession with repute for at least five years, must be a fit and proper person to receive the distinction, and must produce an essay approved by the President of the Faculty.

5. On the 31st March 1881 seven Bengal colleges were affiliated in law to the Calcutta University. In 1886 the number had risen to 10, in 1892 to 12, in 1897 to 16, and it is now 17. The 17 colleges are distributed as follows:—

Calcutta	.	.	.	.	.	.	.	.	.	4
Presidency Division	.	.	.	.	.	.	.	.	.	2
Burdwan	"	.	.	.	.	.	.	.	.	2
Rajshahi	"	.	.	.	.	.	.	.	.	1
Dacca	"	.	.	.	.	.	.	.	.	3 (of which two at Barisal).
Chittagong	"	.	.	.	.	.	.	.	.	1
Patna	"	.	.	.	.	.	.	.	.	2
Bhagalpur	"	.	.	.	.	.	.	.	.	1
Orissa	"	.	.	.	.	.	.	.	.	1

Seven are Government Colleges, one (Midnapur) is under Municipal management, and nine are unaided colleges. All the four Calcutta Colleges are unaided institutions under private management. They are the Metropolitan Institution (affiliated in law in 1882), the City College (1883), the Ripon College (1885) and the Bangabasi College (1896).

The Presidency College law classes, which were closed in 1884 because almost all the pupils which charged a fee of Rs compared with

Of the 728 students of 1900 no less than 527 came from the four unaided Calcutta institutions, and of the students of 1901 415 were from the Ripon College. In the latter year the number of students in the seven Government mofussil colleges amounted only to 105.

9. The following are five years' results of the B. L. Examination of candidates from Bengal Colleges :—

	Candidates.	Passed.	Percentage of passes.
1896	400	204	51
1897	468	239	51
1898	450	206	46
1899	450	102	23
1900	553	160	29

Of the 911 candidates who passed during these five years only 27 were placed in the first division. Altogether only eight students have passed the Honours Examination, and seven of them have taken the D. L. degree. The list of Bachelors of Law in the University Calendar shows a total number of 3,669. Anything above a second class B. L. is thus a matter of rare occurrence.

10. The numerous Bengal Law classes do not seem to deserve the praise bestowed on them by Sir A. P. MacDonnell. Mr. Nash remarked as follows in the review on Education during 1887-88 to 1891-92.: "In his note Mr. MacDonnell appears to set too high a value upon the instruction given in these classes; as a matter of fact there is little if any real teaching; the students rely solely upon their own unaided efforts to pass the University examination, and attend lectures merely for the purpose of obtaining the certificate of attendance which is required by the University. If this certificate were not required every student would at once leave the colleges. To make the teaching of law a reality in Bengal, it would be necessary to establish a college similar to that of Madras, and to make attendance at a much larger number of lectures compulsory. At present candidates are required to attend only 24 out of 36 lectures in each of the eight branches of Law." In the Resolution on this Review the Government of India remarked: "The necessity for Law students reading for a period at any rate at the Provincial head-quarters, where the best instruction is available, has been recognized in Madras and Bombay. The Bengal Government is also of opinion that to make the teaching of Law a reality, it would be necessary to establish a College similar to that at Madras." Again in reporting on Education in Bengal for the period 1892-93 to 1896-97, the Director of Public Instruction confirmed Mr. Nash's remarks and said that there is little real teaching in any of the law institutions and that the students attend lectures merely for the purpose of obtaining the necessary certificate.

Madras.—The University gives two degrees—Bachelor of Law (B. L.) and Master of Law (M. L.). Before 1887 there was a two years course begun after taking the B. A. degree. The course was then raised to three years with two examinations. Under the existing regulations candidates for the first B. L. Examination must have studied for three consecutive terms in a Law College recognized by the Governor in Council, of which one term at least must be subsequent to passing the B. A. Examination. There are two terms in the year. Candidates for the second B. L. Examination must have studied for three more terms in a recognized College. The course for the first B. L. Examination is:

- i—Jurisprudence.
- ii—Roman Law.
- iii—The Law of Contracts including Negotiable Instruments.
- iv—The Law of Torts.

The principles of equity are included in so far as they relate to the above subjects.

And for the second B. L. Examination :

- i—The Theory and Law of Property, including
 - (a) the Law of Trusts and Trustees, and (b) the Transfer of Property.
- ii—Hindu and Muhammadan Law.
- iii—Indian Constitutional Law.
- iv—The Law of Evidence.
- v—Criminal Law

The principles of equity in so far as they relate to the above subjects.

In each examination the successful candidates are ranked in three classes in order of proficiency :—

- Class 1.—Not less than 66 per cent. of the aggregate number of marks.
- Class 2.—Not less than 50 per cent.
- Class 3.—Not less than 40 per cent.

Candidates failing to obtain one-third of the marks in each subject, or 40 per cent. of the aggregate, do not pass.

The new regulations for the Madras College, described in paragraph 13, provide only for a two years' course, and this change will probably entail a reversion to the regulations in force up to 1887. Candidates may present themselves for the M. L. Examination two years after passing the B. L. Examination. The successful candidate are arranged in three classes, the percentages being the same as in the other examinations.

12. The only Law Colleges recognized by the Governor in Council are the Madras Law College and a small College at Trivandrum in the Native State of Travancore. The regulations allow private pupils to present themselves for examinations under special exemption, but the number of such candidates is inconsiderable. Legal education in the Madras Presidency is, therefore, almost entirely confined to the Government Law College. This centralized system has been deliberately maintained.

13. The present Government Law College rose out of the Law classes in the Presidency College which were probably opened in connection

- A. Proceedings, February 1889, Nos. 125-128.
- A. Proceedings, February 1890, Nos. 71-75.
- A. Proceedings, May 1891, Nos. 48-61.
- A. Proceedings, July 1895, Nos. 41-45.
- A. Proceedings, November 1895, Nos. 73-75.
- B. Proceedings, June 1899, No. 21.
- B. Proceedings, October 1899, No. 8.
- A. Proceedings, January 1901, Nos. 33-36.
- A. Proceedings, April 1901, Nos. 7-9.
- A. Proceedings, June 1901, Nos. 33-34.
- A. Proceedings, July 1901, Nos. 64-65.
- A. Proceedings, September 1901, Nos. 2-3.

with the founding of the University. Somewhere about 1870 they were held in abeyance owing to the University declining to make a certificate of attendance a condition for earning the law degree. In 1873 the University passed a regulation making such attendance compulsory, and the law classes were resuscitated. An English barrister was appointed lecturer at an annual cost of Rs. 600, and students were charged fees at the rate of Rs. 10 a course or Rs. 20 a year. In 1883 the Director of Public Instruction complained that the system was

working in a very unsatisfactory manner. The class was unpopular, and the results of the University Examination bad. The Director pointed out the following main defects: only 60 lectures were delivered a year, there was no tutorial instruction, students were granted certificates of attendance irrespective of the progress they had made, and the course of instruction was unscientific. The Director proposed to reorganize the system of teaching by introducing a natural order of progress in the subjects studied and in the standard of instruction, by supplementing the lectures by tutorial instruction, by making promotion from the second to the first class dependent on the results of improved examinations, by making knowledge of the practices of the courts part of the course, and by increasing the hours of instruction. With regard to this latter point it may be remarked that the Director proposed to change the hours from 6-7 in the evening to 7-9 in the morning. These proposals were approved and to carry them out a senior Professor on Rs. 500 and a junior Professor on Rs. 400 were substituted for the original Professor on Rs. 300. The two Professors were to do tutorial work as well as lecture. To meet the additional cost the fees were raised from Rs. 30 to Rs. 50 a session. In sanctioning the two appointments the Secretary of State laid down the principle that the class must be self-supporting. In 1886 it was reported that the new system had secured better results and that the pupils had shown greater diligence and industry. It was decided to continue the scheme for another two years. In 1886 came Sir A. P. MacDonnell's note and in 1887-1888 the revision of the regulations by the University entailing a three instead of a two years course. In 1888 the Director of Public Instruction proposed to substitute a Law College in Madras in place for the Law classes of the Presidency College, which said he had not been so successful as he had hoped. He attributed this want of success to three main causes: (a) The system of teaching introduced in 1884 had not been fully carried out, (b) the students of the classes did not devote an adequate amount of time to study, and (c) the period of two years was too short a course. The third defect was removed by the change in the University Regulations. With regard to the first the Director of Public Instruction insisted that the tutorial instruction was insufficient. Each Professor devoted only two hours a week to lectures and one to tutorial work, while his classes contained as many as a hundred pupils. To improve matters the Director proposed a scheme of which the main feature was the conversion of the existing classes into a separate college with an English lawyer as its whole-time Principal. Sir A. P. MacDonnell's suggestion regarding the institution of law classes in mofussil colleges was kept in view, but the Government of Madras rejected the plan under the advice of the High Court and Law Faculty of the University. It was considered that the number of law students in mofussil towns was insufficient for the maintenance of efficient Law classes, and that the best course was to develop and improve the instruction given at Madras. In 1891 after considerable discussion the establishment of a separate Law college was sanctioned by the Secretary of State as an experimental measure and on the assurance that it would be self-supporting, the appointment of the Principal being in the first place limited to 5 years. The Secretary of State hoped that after the expiry of this term it would be possible to place the college on a wholly independent footing, Government being relieved of all responsibility in respect of it. The following is an outline of the scheme as finally introduced. Notwithstanding the appointment of a full-time Principal the institution was not to be a day college. Many of the students were occupied in Government

and private offices and the Professors were practising lawyers. For the convenience of teachers and students the rules fixed the lecture and tutorial hours at between 7 and 10 A.M., and 5 and 8 P.M.* The general control was vested in the

* The hours were subsequently altered.

Director of Public Instruction and the Government in the Principal aided by a consultative Council composed of the Principal, two Professors, and any other members who might be appointed by the Government. The Chief Justice and the Judges of the High Court were appointed ex-officio visitors. In 1901 the Council consisted of the Principal and two Professors, four Judges of the High Court, and the Chief and one other Judge of the Small Cause Court. When they became strongly represented on the Council the Judges of the High Court ceased to exercise the function of visitors. The staff was fixed at a whole-time Principal on Rs 1,200 with permission to take chamber practice, a senior and a junior Professor and, funds permitting, at least two Assistant Professors. Two were at first appointed, a third was added in September 1891, and three more and a lecturer on Medical Jurisprudence in 1893. The Calendar for 1901 shows only four Assistant Professors. The Professors and Assistant Professors were practising barristers or vakils of not less than five years standing. They were paid by fees for both lectures and tutorial work. The rates fixed were found to be too low and they were raised in 1893, in the case of Professors to the equivalent of Rs 350, and in the case of Assistant Professors to the equivalent of Rs 150 a month. The Professors were required to give lectures, do tutorial work and hold half-yearly examinations. Each Professor was to devote not less than two hours a week to lectures and one hour to classes, and in the case of the Principal these figures were raised to eight hours and seven hours, respectively. In practice the Principal never did so much and it was afterwards admitted that the amount was excessive, and it was reduced to a total of ten hours a week, or two hours per working day. The work of Assistant Professors was mainly tutorial. They were also required to lecture to the pleaders' classes and were to devote not less than three hours a week to their duties. The course for the B. L. student was three years. Promotion from one class to another was regulated by examination in which one-third marks had to be earned. In 1898 or 1899 a more stringent rule was passed prohibiting students from joining the second B. L. classes until they had passed the first B. L. examination. The Director might award scholarships and prizes and certificates of merit. The rules provided for students attending Courts and taking notes of cases. The estimates framed by the Director showed that the receipts of the College would cover the cost of the scheme, and the students' fees were therefore left at Rs 50 a term. In 1895 the Secretary of State sanctioned the continuance of the College on its original footing for another five years, it having been represented that it would be premature for the Government to abandon it, that its maintenance did not cost anything to the Government, and that no body of persons were willing to take over its charge. In reporting on the working of the College the Principal said that it had improved the course of instruction and made it more scientific. The result of the examinations had not however been satisfactory and this the Principal attributed to the students giving insufficient time to their law work (many spending the day in office or in studying for the B. A. degree) and to the unwieldy size to which the classes had grown. The Principal was re-engaged on a second five years' agreement which permitted him to take work in the Courts provided this did not interfere with his college duties. In 1899 complaints were made that the Principal and Professors neglected their college duties for legal practice and a question was asked on the subject in the House of Commons. In addressing the Secretary of State the Madras Government said that the complaints had little basis and that the examination results showed steady improvement; they admitted, however, that the working of the college had not been altogether satisfactory. The Principal had only devoted seven hours a week to lectures and tuition and he was told that this total must be increased to ten hours. The hours of study were altered to make them more convenient to the professors and students. At the same time the Madras Government promised that on the expiry of the Principal's second term of appointment the whole constitution should be revised. This promise was carried out and the Secretary of State has sanctioned a scheme for the management of the institution as whole-time college with day lectures and tuition and a staff of whole-time teachers. This closes the college to persons working in Government and private offices, a class of students formerly numerous but latterly diminished. The change is to be facilitated by the reduction of the course from three to two years. It is considered that for a full-time college this shorter course will be sufficient for adequate instruction. Arrangements have presumably been made with the University for a corresponding change in their regulations. The students' fees have been raised from Rs 50 to Rs 75 a term and the total fee for the course will thus be Rs 300 as before. The whole-time staff consists of a Principal and Senior Professor on Rs 1,000 rising to Rs 1,250, a Junior Professor on Rs 650 rising to Rs 900, and two Assistant Professors of the vakil class on a maximum salary of Rs 250 a month. The Principal and Professor are appointed in England and are allowed chamber but no other practice. It is estimated that the receipts from fees will cover the cost of the new scheme. The Government of Madras wished to abandon the Consulting Council and to leave the college under purely departmental management. The Government of India objected to this proposal in view of the Secretary of State's opinion that the Government should ultimately withdraw from the management of the college and also because they regarded it as an advantage that the institution should be placed in direct contact with the Judges of the High Court and the legal profession. The Government of Madras accepted this view, but modified the constitution of the council by reducing the position of the Principal of the college from Chairman to Member and altogether omitting the other members of the staff.

14. The following statement shows the strength of the college on the 31st March of each of the first ten years of its existence :—

Year.	Third B. L. class.	Second B. L. class.	First B. L. class.	Pleaderships class.	TOTAL.
1892 . . .	94	88	128	50	360
1893 . . .	88	118	201	107	573
1894 . . .	115	167	279	30	591
1895 . . .	156	235	213	28	630
1896 . . .	222	201	273	35	731
1897 . . .	191	246	152	31	620
1898 . . .	229	128	204	51	612
1899 . . .	121	175	103	18	417
1900 . . .	45	98	90	34	267
1901 . . .	275			35	310

Various causes have influenced the decline since 1896. In 1897 and 1898 it was said to be due to the disastrous result of the B. A. Examination in English held in January 1897. In 1899 the same cause was attributed and in addition the unsuccessful results of the B. A. Examination of 1899, the prohibition of students who have failed in the First B. L. Examination to proceed with the Second B. L. course, and possibly the gradual overcrowding of the bar. The same causes affected the figures of 1900 and to a lesser extent of 1901.

15. The following statement shows the result of the final B. L. Examination in the case of students passing direct from the College :—

	Examinees.	Passed.	Percentage.
1892	63	21	33·3
1893	69	25	36·2
1894	63	15	23·8
1897	88	25	28·4
1898	35	10	28·5
1899	73	22	30·1

In the following statement figures are given from 1897 onwards for all classes of candidates :—

	Madras College.	Travancore College.	Private Pupils.
1897	191—50—26·3	10—2—20	2—0
1898	223—57—25·5	8—1—12·5	1—0
1899	303—93—30·7	13—1—7·7	1—0
1900	296—98—31·4	20—7—35	2—0
1901	291—118—40·5	26—16—61·5	11—7—63·7

The examination last year must have been easier than usual. It will be noticed that in 1897 to 1899 most of the Madras College candidates did not present themselves for examination direct from the College. A similar practice will be noticed in Bombay and the North-Western Provinces. The education reports for 1900 and 1901 show practically all the College students as passing direct from the College. It is not likely that such a radical change occurred suddenly without special reason and there is probably some mistake in the manner of showing the figures.

16. The Calendar for 1901 shows a total number of 900 B. L.'s of whom 175 passed in the second and only seven in the first class. In all there have been only 11 M. L.'s.

17. *Bombay.*—The University only gives the degree of LL.B. There is also an Honours examination open to LL. B.'s, but I cannot find that any one has presented himself for it. Up to 1889 candidates for the LL. B. Examination were required to follow a three years' course at an institution affiliated in law, which might be taken concurrently with the Arts course, but the candidate could not present himself for examination until two years after taking the B. A. or B. Sc. degree. In 1890 the rules were improved and made more precise. There are two examinations. Candidates for the First LL. B. Examination must, after passing the previous Examination in Arts have studied for two terms (making one year) at an institution affiliated in law. The subjects of the examinations are Roman Law and General Jurisprudence. A candidate taking Roman Law and Jurisprudence as his optional subject for the B. A. degree is considered to have passed the LL. B. if he attain the necessary standard. Candidates for the Second LL. B. Examination must, after taking the B. A. or B. Sc. degree, have kept four terms (two years) at an affiliated institution. The following are the subjects of examination :—

- (1) Succession and family rights, with special reference to Hindu and Muhammadan Law.
- (2) The Law of Contracts and of the Transfer and Lease of Immoveable Property.
- (3) Equity with special reference to the Law of Trust, Mortgages and other securities for money, and Specific Relief.
- (4) The Law of Torts and Crimes.
- (5) The Law of Evidence, Civil Procedure including Limitation, and Criminal Procedure.

In both examinations the names of the successful candidates are published in two classes in alphabetical order.

18. In addition to the Government Law College of Bombay five institutions are affiliated up to the first LL. B. Standard. These are the Law Classes at the following Colleges :—

Deccan College, Poona	Under Government management.
Gujarat Provincial College, Ahmedabad	} Aided Colleges under private management.
Dayaram Jethmal Sind College, Karachi	
Baroda College	} Under the management of Native States.
Smaldas College, Bhavnagar	

The largest of the mofussil law classes is that at Poona. It was started in 1885 to enable students to keep some of their law terms before graduating. The Gujarat, Sind and Baroda classes were started in 1890 or 1891 after the new University regulations came into force. The Bhavnagar class, which is the smallest, was opened in 1896. The Calendar of 1901 shews the following number of students belonging to each law class: Poona 34, Gujarat 18, Sind 19, Baroda 24, and Bhavnagar 10.

In the examinations of 1899 and 1900 the following number of candidates passed from each class :—

Poona.	Gujarat.	Sind.	Baroda.	Bhavnagar.
1899 . 14	1899 . 9	1899 . 4	1899 . 12	1899 . 1
1900 . 22	1900 . 9	1900 . 8	1900 . 12	1900 . 4

Each of the mofussil law classes has one lecturer. In the Poona College he receives Rs 25 a month, and the fee paid by each student is Rs 25 a term.

19. The Government Law School at Bombay is the only institution affiliated up to the second LL. B. Examination, and it has thus the monopoly of higher legal education in the Presidency. It was started in 1856 when two Government Professorships of Rs 300 each were instituted, besides an addition by Government of Rs 100 a month to Rs 169, the proceeds of a public subscription endowing a Professorship of Jurisprudence in honour of Sir Erskine Perry, a former Chief Justice of Bombay. Until recently the school has not had a satisfactory history. In January 1890, the Government of Bombay represented that it did not work well. They said that "the lecturers are half-time officials, who give but a fragment of their attention to their duties as Law Professors, and for the most part look to throwing up their appointments as their professorial gains and engagements increase. There is hardly an attempt at organization or co-ordination of studies; the several lecturers work independently of one another, in general harmony and co-operation, but still without discipline and without that clear direction of effort towards defined aims, which is requisite to really systematic training." To remove these evils the Bombay Government proposed to appoint a full-time European Principal on Rs 800 a month in addition to two Professors on Rs 300 and to spend Rs 500 a year on a library. The Principal was to be debarred from all private practice for the first three years, and then to be permitted such practice as would not interfere with his college duties. The proposals involved a net cost to Government of Rs 7,444 a year. The Government of India approved generally of the scheme but suggested that, as in the case of Madras, it should be made self-supporting by an increase in the fees. The Government of Bombay were reluctant to raise the fees, which were Rs 25 a term or Rs 50 a year, as the students were mostly poor and were put to the expense of living in Bombay. They consented, however, to a rise to Rs 30 a term or Rs 60 a year, leaving a little over Rs 5,000 year to be provided by the State. The Government of India were not satisfied with this proposal and referred to the opinion expressed by the Secretary of State in the Madras case that such institutions should be self-supporting. They also said it was doubtful whether a suitable lawyer could be procured from England for Rs 800 a month and suggested that it would be economical and expedient to withdraw the prohibition against private practice. The Government of Bombay replied that if private practice were allowed they could fill the appointment under the existing arrangements, and they dropped the proposals. Later (apparently in 1892) one of the Professors was appointed Principal with an extra allowance of Rs 50 a month, the emoluments of the Professors being re-distributed as follows :—

Old.	New.
Two Professors on Rs 300.	Principal on Rs 350.
Perry Professor on Rs 259.	One Professor on Rs 250.
	Perry Professor on Rs 250.

In 1898, the matter was again brought before the Bombay Government in a manner that could not be ignored. The Senate of the Bombay University passed a resolution that a new private law college the "Bombay College of Law" should be recognized in the Faculty of Law, and that the Government should be requested to authorize the college under section XII of the Act of Incorporation. In the course of the discussion in the Senate the Government Law School underwent severe criticism, and the promoters of the new college contended that the proposed institution was meant to supplement its deficiencies. The chief grounds of complaint against the school were that the staff and course of lectures were inadequate, that the attendance of the lecturers was not regular, that there was no system of examinations to test the industry of the students, that certificates were granted for mere attendance, and that

students often attended not for the instruction but merely to obtain the certificate enabling them to present themselves for the University examination. Sometimes they went up for examination long after the completion of their terms. The Bombay Government declined to authorize the proposed college on the ground that: "it is inadvisable to allow the control of higher legal education to pass to private institutions, for the administration of the law is undoubtedly a part of the general administration of the country, and in spite of the fundamental dissociation of law from politics, there is a distinct danger of the perversion of legal instruction to political uses." But they are obliged to admit that the complaints against the law school were well founded, and they therefore proceeded to consider its reform. For this purpose a Committee was appointed consisting of the Director of Public Instruction, the Chief Judge of the Small Cause Court, a European Attorney and two native Vakils. The Committee produced a very sensible report and their recommendations were accepted by the Local Government and the Government of India and sanctioned by the Secretary of State. In reporting the matter to the Secretary of State the Government of India expressed entire accordance with the view of the Bombay Government that it is inadvisable to allow the control of higher legal education to pass to private institutions. This principle is the opposite of that which obtains in Bengal and which the Secretary of State enunciated in the Madras case.

20. The following is an outline of the scheme introduced at the instance of the Bombay Committee:—

General.—In the first place the Committee decided that in the interests of both professors and students the school must remain as heretofore an evening school. Their proposals therefore followed the lines of the existing institution and maintained the system of a part-time Principal and professors.

Staff.—In place of a Principal on Rs50 and two Professors on Rs250 there is now a Principal on Rs350, and five Professors on Rs300. The appointments are for limited periods, and are open to Barristers, Advocates, Attorneys and Pleaders of the High Court. According to the 1901 calendar, the Principal and four of the Professors are Barristers-at-Law. The Principal and two Professors are Europeans, and three of the Professors have English University degrees.

Tuition.—The large increase to the staff enabled the Committee to propose a great and much needed development in the course of lectures. Under the old system each Professor was supposed to deliver two lectures a week during term time, or about 56 a year. In these few lectures it was only found possible to deal with the following subjects:—(1) Roman Law and Jurisprudence, (2) Contracts and Torts, and (3) Hindu Law and Equity. There were no lectures on the other subjects included in the University curriculum. The new scheme provides for the following tuition to the various classes of the school:—

1st year.—Sixty lectures annually and 30 additional hours of tuition.

2nd year.—Sixty lectures annually in each of five groups of subjects, embracing those required for the second LL. B. Examination.

A Board of Visitors including the Chief Justice, a Judge of the High Court, the Vice-Chancellor of the University and the Government Pleader has been constituted to maintain a general supervision over the school and to assist the Government in the selection of Professors.

Encouragement of Students and discipline.—To induce students to take a greater interest in their studies examinations are to be held in the subject of the lectures delivered. Deserving students are to be rewarded by prizes and scholarships, and idle and careless students to be punished by a refusal to grant the certificate of attendance.

Finance.—The proposals of the Committee raised the charges on account of the school from Rs12,768 to Rs26,100 a year. The Committee accepted the principle that the school must be self-supporting and to meet the additional expenditure the fee for the second LL. B. Course has been raised from Rs50 to Rs70 a year. Calculating on the existing number of students the fees plus the Perry endowment give a total of Rs28,650, leaving a surplus of Rs2,550. The new scheme came into force on the 12th June 1899. During 1899-1900 there was a diminution in the number of students from 427 to 399 and the total fees therefore only amounted to Rs24,751. Adding to this the income from the Perry endowment (Rs1,850) we get Rs26,601 or Rs500 in excess of the estimated annual expenditure. During 1900-1901 there was a further fall of students to 391 and of fees to Rs23,860, and the income was thus below the rate of annual expenditure estimated by the Committee.

21. In his report for 1899-1900 the Director of Public Instruction made the following remarks on the working of the reformed School:—

"The Board of Visitors appointed by Government has manifested due interest in the Institution, and the Principal, Mr. Robertson, reports that the system of holding examinations for the award of prizes in various subjects as recommended by the Committee of Enquiry has been adopted and has been productive of much good in stimulating the energies of the students and in promoting a spirit of competition among them. A sum of Rs700 was expended on prizes and the examinations were held at the close of the monsoon term in the month of September. The Principal remarks:—

"I consider the results of this innovation have more than fulfilled the expectations I had formed of its probable utility in increasing the interest taken in the lectures, both by the students and the Professors."

The subjects of examination for the LL. B. degree are :—

- (1) (a) The Principles of Jurisprudence.
- (b) The History and Constitution of the Legislative Authorities and Courts of Law in British India.
- (2) The Law of Evidence and Pleading { Civil.
Criminal.
- (3) Hindu and Muhammadan Law.
- (4) The Law relating to Contracts; to the Transfer and Lease of Immovable Property; to Registration; to Succession; and to Torts.
- (5) Equity with special reference to the Law of Trusts, Mortgages and Specific Relief.
- (6) The Civil Procedure Code and the Law of Limitation.
- (7) The Penal Code and the Criminal Procedure Code.

24. The method of legal instruction in the North-Western Provinces is similar to that which prevails in Bengal. There is no central law college, but each of the principal Art colleges has a law class attached to it. The Calender for 1901 shows ten colleges (including one in the Central Provinces) as affiliated in law to the Allahabad University. The Report on Public

* The discrepancy of one appears to be due to the closing of the law class at St. John's College, Agra. Instruction for 1900-1901 shows eight law colleges in the North-Western Provinces, of which two are Government, two aided and four unaided. Each

college has one professor for the legal work, which includes not only the LL. B. course, but also courses for the vakil and pleadership examinations. The following figures show the students of all classes on the books of the colleges on the 31st March of the years named :—

1887	117	1899	372
1892	612	1900	397
1897	366	1901	389
1898	260		

The following statement shows the results of the LL. B. Examination :—

	Candidates.	Passed.
1891-92	88	14
1892-93	51	24
1893-94	69	34
1894-95	111	39
1895-96	153	46
1896-97	191	41
1897-98	216	43
1898-99	256	61
1899-1900	63	16
1900-1901	58	7

The fall in 1899 coincides with the introduction of the rule requiring candidates to have passed the B.A. or B.Sc. examination two years before the LL. B. examination. The number of students on the college rolls does not show a corresponding decrease. This appears to be in part due to a rise in the number of non-LL. B. students. The proportion of LL. B. and other candidates has materially changed since the introduction of the new regulations. Thus :—

	LL. B. candidates.	Other candidates.
1897-98	216	127
1898-99	256	140
1899-1900	63	208
1900-1901	58	156

There is probably a corresponding change in the proportion of students, but I cannot find figures to illustrate it.

25. In the North-Western Provinces, unlike in Bengal, the fees do not cover the total cost of the instruction. This will be seen from the following expenditure figures :—

	From Provincial Revenues.	From Fees.	From other sources.
1896-97	R 1,872	R 16,014	R 3,787
1900-1901	2,219	19,253	1,370

In Mr. Nash's quinquennial report (1887-88 to 1891-92) it is said that the fees in the two Government Colleges were R40 a year for each student, in the three aided colleges R18 on the average, and in the two unaided law classes R22. I cannot find later figures.

26. The examination results given above are eminently unsatisfactory. They have not escaped comment, and complaints have been made against the North-Western Provinces system very similar to those brought against the similar system in Bengal. From remarks made by Principals of Colleges in 1892-93 and 1896-97 it appears that many students used to attend the classes without any intention of presenting themselves for examination,

apparently believing that the mere certificate of attendance would be of use in seeking employment. The Education report for 1899-1900 quotes the following remarks by the Officiating Professor of Law at the Canning College, Lucknow :—“ A great many of the students take very little interest in their work and merely attend the class with the object of obtaining the certificate to enable them to present themselves for examination : it is therefore no great matter for wonder that numbers fail to pass.” The Professor went on to say that the course was too long to be dealt with in part time work for two years. This defect has since been removed or lessened by the University Regulations requiring students to pass the B. A. Examination before taking up the Law Course. The Principal of the same College remarked that the majority of students do not present themselves for examination until some years after they have finished their compulsory course of lectures. The North-Western Provinces Government is taking steps to improve the character of the education by some degree of centralization. In November last the Law lectureship at Benares was abolished and two readership in Law established as the Muir Central College, Allahabad.

27. *The Punjab.*—The only institution teaching law in Punjab is the Lahore School of Law which is under the direct management of the University. The institution was at first aided by the Government, but is now entirely supported by students' fees. The School was founded in 1870 for the instruction of candidates preparing for the Mukhtarship and Pleader-ship examinations. It was taken over by the University in 1892 and the first diplomas were granted in that year. The University Regulations prescribe the course of study and the system of management as well as the examinations and rules for the conferring of degrees. At first the University granted only the diploma of Licentiate in Law, but from 1892 onwards the degree of Bachelor of Laws has also been conferred. There is a three years' course for the licentiate diploma, and it may be followed concurrently with the Arts course. For the purpose of this course the College is divided into three classes. At the end of the first class comes the preliminary examination, at the end of the second class, the First Certificate Examination, and at the end of the third class, the Diploma Examination. The following is the course of study for each class :—

First year's class—

1. Outlines of General Jurisprudence.
2. Outlines of Constitutional Law.
3. Elements of the Law of Contracts and Torts.
4. Principles of Criminal liability.
5. The Law of Evidence.

Second year's class—

1. Civil Procedure and Appurtenant Arts relating to the Punjab.
2. Drafting deeds and judicial documents
3. Revenue Law and Procedure applicable to the Punjab.
4. Criminal Law.
5. The Law of Evidence, Limitation, Registration, Stamps and Court Fees.
6. Hindu and Muhammadan Law and the Customary Law of the Punjab.

Third year's class—

1. An advanced course of instruction in—
 - (a) General Jurisprudence and Constitutional Law.
 - (b) The Law of Contracts and Torts.
2. The Law of Property including Land Tenures and Tenant Right, Easements and the Acquisition and Transfer of Rights in Property.
3. The Law relating to Minors.
4. The Law relating to Trusts.
5. The Law of Intestate and Testamentary Succession.

Candidates for the Preliminary Examination must have passed the University Intermediate Examination and attended three-fourths of the lectures of the first year's class. Candidates for the First Certificate Examination must have passed the Preliminary Examination and attended three-fourths of the lectures of the second year's class. Candidates for the Diploma Examination must have graduated in Arts, passed the First Certificate Examination, and attended three-fourths of the lectures of the third year's class. For each examination pass marks are one-half in each subject and an aggregate of three-fifths. A candidate obtaining not less than three-quarters marks is shown as having passed with credit. Instruction up to the diploma is given in vernacular as well as in English and the examinations are held in both languages. From 1882 to 1900, 222 diplomas were given. In 10 cases the candidate passed with credit. Sixty-two of the successful candidates followed the vernacular course. Of late years the proportion of vernacular students has greatly diminished.

28. The LL. B. Examination is open to any graduate in Arts who has passed the Licentiate Examination or gone through a special degree course of which the outline is as follows.

* *N.B.*—He must have graduated in Arts before presenting himself for examination.

The candidate must first attend the first year class and pass the Preliminary Examination.* He must then attend the third year class and pass an Intermediate Examination comprising all the diploma subjects and in addition the Law of Limitation. He must finally attend the LL. B. class for one year, and is then qualified to present

himself for the final examination. The subjects are Jurisprudence, International Law, Constitutional History and Roman Law. Pass marks are 40 per cent. in each subject, and 50 per cent. places the candidate in the first division. From 1892 to 1900, 117 candidates passed the LL. B. Examination, 12 of whom were placed in the first division.

Provision is made for an LL. D. Examination but no one has as yet passed it.

29. The following figures show the number of students on the books of the school on the 31st March of each year:—

1892	.	.	.	.	.	85	1897	.	.	.	.	.	433
1893	.	.	.	.	.	84	1898	.	.	.	.	.	434
1894	.	.	.	.	.	169	1899	.	.	.	.	.	411
1895	.	.	.	.	.	290	1900	.	.	.	.	.	368
1896	.	.	.	.	.	336	1901	.	.	.	.	.	248

The rise from 1893 to 1897 was described by the Director as "a remarkable rush in the direction of law." There has since been a re-action, but the Director does not think that there is any likelihood of the attendance falling below a proper level.

30. The following statement illustrates the results of the examinations of candidates from the school. The three figures under each head are for candidates, passes and percentages.

	Preliminary.	First certificate.	Licentiate.	Intermediate.	LL. B.
1891-92	25-19-76	12-4-33.3	7-3-42.9	...	...
1896-97	124-95-76.6	74-25-33.7	12-9-75	35-23-65.7	14-12-85.7
1897-98	147-91-61.9	101-63-62.3	17-7-41.2	48-19-39.6	31-17-54.8
1898-99	160-112-70	71-35-49.3	45-23-51.1	66-34-51.5	37-17-46
1899-1900	119-96-80.7	80-51-68.7	54-30-55.5	76-47-61.8	52-28-44

These figures are for school students only. The total figures for 1899-1900, 1900-1901 are:—

1899-1900	145-110-75	108-70-64	55-31-56	76-47-61	52-23-44
1900-1901	95-42-44	94-45-47	72-30-41	69-32-46	64-25-39

The figures include private students, and students who did not present themselves for examination direct from the college. There is a steady level of achievement which compares favourably with the results in other Provinces.

31. The management of and supervision over the school is, subject to the approval of the Law Faculty and control of the Syndicate and Senate, vested in a Committee consisting of the Vice-Chancellor, the three members of the Board of Studies of the Law Faculty, and two members elected annually by that Faculty. This arrangement was made in 1897-98 to meet the need for more complete organization caused by the large rise in the number of students. It was stated in the Director's Report for 1900-1901 that the re-organization of the school had been decided on, and a whole-time Principal and an additional law lecturer appointed. The Calendar for 1901 gives the following staff:—

Principal.
Senior Assistant Law Lecturer.
Assistant Law Lecturer.
Second Assistant Law Lecturer.
Law Reader.

32. *Central Provinces.*—There is a Law class in the Government College at Jubbulpore affiliated to Allahabad and another in the aided college at Nagpur affiliated to Calcutta. Neither are self-supporting. In 1900-1901 the average number of pupils in the Jubbulpore class were 18 and in the Nagpur class 22. One student passed from Jubbulpore and 5 from Nagpur. In the report for 1899-1900 the Director expressed himself dissatisfied with the Nagpur class. Attendance was slack and fees in arrears. In the report for 1900-1901 the Director also said that the Jubbulpore class was not a success and did not place within the reach of students a thorough grounding in the principles of Law. He blamed the system and the University. He further expressed the opinion that the standard at Allahabad was much higher than at Calcutta and that the difference was growing wider.

33. *Assam.*—Has only law classes in high schools for pleaders' examinations.

34. *Burma.*—There is a small law class attached to the Rangoon College and affiliated to Calcutta. In 1900-1901 there were seven students in the class, of whom four were reading for the B. L. degree.

R. NATHAN, — 24-1-02.

TEACHERS OF THE UNIVERSITY OF LONDON.

Lord Selbourne's London University Commission (1888) considered the manner in which the teaching power of the University should be given a voice in its management. They decided that Faculties should be formed of professors and recognized public teachers in arts, science, laws and medicine, respectively, belonging to the constituent and associated colleges and institutions of the University, and that these Faculties should be exclusively electoral bodies voting by their respective Faculties for a certain number of representatives of such Faculty on the Senate.

2. The Gresham University Committee (1892) proposed to give more extended powers to the teaching element. In addition to electing representatives for the Senate, the Faculties were to elect a central body from among themselves to be styled the Academic Council, which was to regulate teaching, examination, discipline and the recognition of teachers and to advise the Senate. The Council was to be assisted by Boards of Studies: advisory bodies elected mainly from the Faculties. The Faculties were further to be given the right of expressing on their own initiative an opinion on the subjects with which they were respectively concerned.

3. The arrangements made under the London Universities* Act, 1898, followed mainly the suggestions of the Gresham Commission but did not give executive functions to the Academic Council.

All the following References are to the London University Calendar.

* Volume 1, page 32.

4. In accordance with the directions contained in the Schedule† to the Act the Commissioners appointed to prepare the Statutes and Regulations declared the following persons to be Teachers of the University:—

† Volume 1, page 37.

Statutes, Section 71, Volume 1, page 57.

(i) *Appointed Teachers*.—The Professors, Assistant Professors, Readers and Lecturers of the University appointed as officers of the University by the Senate.

(ii) *Recognized Teachers*.—Such members of the teaching staffs of Public Educational Institutions within the appointed radius, whether schools of the University or not, as on the day fixed for the coming into force of the Statutes shall have been recognized as teachers of the University by the Commissioners or shall thereafter be so recognized by the Senate.

Schools of the University include the institutions named by the Commissioners and the institutions within the City and County of London from time to time admitted by the Senate. The teachers in any school of the University do not become teachers of the University unless and until they are individually recognized as such. A teacher may be recognized in connection with more than one institution at the same time. The Senate is required to keep a register of recognized teachers. Recognized teachers continue to be recognized as long as the conditions under which they were recognized are fulfilled. The Senate may remove and restore the name of a recognized teacher. The Senate is required to take care that only such persons are recognized as teachers of the University as being duly appointed members of a teaching staff of a Public Educational Institution, are regularly engaged in giving at the institutions to which they belong adequate courses of instruction of a University standard, and are provided with such laboratory accommodation, apparatus and other appliances as may be necessary for the instruction which they give. The Senate may in special cases temporarily recognize teachers not belonging to Public Educational Institutions within the appointed radius, who are prepared to give to Internal Students a course of lectures on any subject of University study.

Section 70.

Section 78.

Section 89.

Section 90.

Section 91.

Section 92.

Section 93.

Section 94.

Volume II, pages 50–51.

5. The following are the detailed Regulations for the recognition by the Senate of teachers of the University:—

1. Every application for the recognition of any person as a teacher of the University shall be made in writing by the School of the University or Public Educational Institution of the teaching staff of which the candidate is a member, and shall be signed by the Principal or acting Head of such School or Institution, and when forms for the purpose are provided by the Senate shall be on one of such forms.

2. Every such application shall contain a statement of the following particulars:—

- (a) That the Institution making the application (if not a School of the University) is a Public Educational Institution within the appointed radius within the meaning of the Statutes.
- (b) The branch or branches of knowledge in respect of which the candidate desires to be recognised.
- (c) His University degree or other qualifications for teaching the subjects in respect of which he desires to be recognised, and his exact position on the teaching staff of the Institution making the application.

- (d) That he is regularly engaged in giving in the Institution applying courses of instruction of a University standard.
- (e) A syllabus or other short description of the course or courses of instruction which he gives in the branch or branches of knowledge in which he desires to be recognised, including the number of lectures given by him or number of hours devoted by him to teaching in each week, and whether in the daytime or in the evening only.
- (f) Whether he has prepared or assisted in the preparation of students for the examinations for a University degree, specifying the particular subjects in which he has so prepared or assisted in the preparation of students, or any other evidence he may be able to give of his qualifications as a University teacher.
- (g) A short statement of the provision in the Institution making the application (not being a School of the University) of the laboratory accommodation, apparatus, and other appliances (if any) as are necessary for the instruction which he gives.
3. The Institution making the application (not being a School of the University) shall, if required by the Senate or the Academic Council, furnish a copy of its Charter, Special Act of Parliament, or Memorandum and Articles of Association, or the deed or other instrument of its foundation.
4. The Institution making the application, and the Candidate shall give such further or other evidence as may be required by the Senate or the Academic Council as to any of the foregoing particulars, and as to the fitness of the Candidate to be recognised as a teacher of the University, having regard to the requirements of the Statutes.
5. Every application shall be addressed to the Senate and by it referred to the Academic Council, who may, if it shall think fit, call for a report thereon from any of the Boards of Studies. A copy of every report of a Board of Studies on such application shall be transmitted to the Dean of the appropriate Faculty, pursuant to Statute 106, and shall accompany the report of the Academic Council to the Senate.
6. The Senate, after receiving the report of the Academic Council, shall decide whether the Candidate shall be recognised as a teacher of the University.
7. Every Public Educational Institution (not being a School of the University) which has a recognised teacher on its staff shall, on or before the 31st day of December in every year, make to the Senate such a report on the instruction given in the Institution by a recognised teacher, and the provision made for the same, as will enable the Senate to judge whether the conditions of recognition are being fulfilled. Such reports shall be referred to the Academic Council for their consideration and report.
8. Any two members of the Senate may propose any duly qualified person, not being a member of a Public Educational Institution within the appointed radius, for temporary recognition as a teacher of the University, pursuant to Statute 94, and such proposal shall thereupon be referred to the Academic Council, who shall proceed thereon in the same way as upon an application for recognition.

6. In accordance with the provision of the Statutes the Commissioners prepared a list of 573 persons belonging to Educational Institutions within the appointed radius to be recognized as teachers of the University. I have not been able to find any papers bearing on the manner in which their selection was made. University and King's Colleges gave by far the largest number of representatives and next to them came the big medical schools. The teachers were selected from 49 public institutions of which 21 were and 28 were not schools of the University.

The Calendar for 1901-1902 gives 680 recognized teachers divided among the Faculties as follows: Theology 17, Arts 95, Laws 3, Music 49, Medicine 372, Science 51, Engineering 32, and Economics and Political Science 11.

The Calendar also shows the course of study given by every recognized teacher and by every other teacher in the schools of the University. Only two teachers have as yet been appointed by the University: one the Professor Superintendent of the Brown Animal Sanatory Institution; the other the Director of the Department of Practical Chinese, endowed by the China Association.

7. All University teachers are not necessarily members of the Faculties. The Faculties are composed of:—

- (a) Recognized teachers nominated by the Commissioners,
- (b) Appointed teachers,
- (c) Recognized teachers admitted from time to time by the Senate.

Under (a) the Commissioners nominated the following number of recognized teachers to be members of the respective Faculties: Theology 8, Arts 31, Music 10, Medicine 162, Science 51, Engineering 13, and Economics and Political Science 10. Total 235, or just half the number of teachers recognized by the Commissioners. In admitting teachers to be members of Faculties, the Senate is required to take care that as far as possible all sections of teachers are represented. Membership continues as long as the member continues to be a teacher of the University. The Faculties appoint by election 16 out of the 54 members of the Senate in the following proportions: Theology 1, Arts 4, Laws 1, Music 1, Medicine 3, Science 4, Engineering 1, Economics and Political Science 1. At any meeting of a Faculty the members are required to report on any matter referred by the Senate, and may of their own initiative report on matters relating to subjects comprised within the Faculty.

8. In place of the Academic Council proposed by the Gresham Committee there are three Standing Committees of the Senate: (1) the Academic Council, (2) the Council of External Students, and (3) the Board to promote the extension of University teaching. They are all advisory bodies. The first and second are composed of the Chancellor, the Vice-Chancellor, the Chairman of Convocation, the sixteen members of the Senate appointed by the Faculties, and other members of the Senate, elected by the Senate, sufficient to bring the numbers up to twenty and twenty-eight, respectively. The Senate is required to consult them in all matters relating to Internal and External Students, respectively. The University Teachers are not specially represented on the third Standing Committee.
- Section 28.
- Sections 32 and 34.
- Sections 33 and 35.
- Section 36.
9. Boards of Studies are appointed to advise the Academic Council and the Council for External Students upon matters relating to courses of study, provision for teaching and research, examinations and the appointment of Examiners, and the granting of degrees and certificates of proficiency. The members of the Boards are appointed annually by the Senate from such members of the Faculty and other teachers of the University as teach or examine in any of the subjects for which the Board is constituted. The Senate may also appoint such other persons as it may think fit not exceeding one-fourth of the total number. The Senate is required to take care that teachers of the University not belonging to any school of the University are adequately represented on each Board.
- Section 98.
- Section 99.

R. NATHAN,—24-1-02.





सत्यमेव जयते

**Statement showing the caste or race of persons passing the
Matriculation and B. A. Examinations.**





सत्यमेव जयते

MADRAS.

Examination.			Brahmins.	Non-Brahmins.	Muhamadans.	Europeans and Eurasians.	Native Christians.	Parsees.	Jews.
Matriculation ...	{	1898	1,251	376	29	68	181	4	2
		1899	893	283	22	45	119	...	...
		1900	932	285	26	44	133	3	...
B.A. 1898	{	English Language Division	285	41	3	5	34	...	...
		Second " "	328	59	6	4	31	...	...
		Science Division ...	301	57	6	3	30	...	...
" 1899	{	English Language Division	236	65	3	6	31	...	...
		Second " "	334	84	6	9	46	1	...
		Science Division ...	340	75	2	6	33	1	...
" 1900	{	English Language Division	256	56	1	12	29	...	...
		Second " "	403	82	7	10	37	...	...
		Science Division ...	292	62	7	6	27	...	...

BOMBAY.

Examination.				Brahmins.	Non Brahmins.	Muhamadans.	Europeans and Eurasians.	* Native Christians.	Parsees.	Jews.
Matriculation.				† Hindus.						
1899	...	...	...	750		32	23	33	167	7
1900	...	...	...	883		36	44	55	150	3
1901	...	...	...	932		31	30	49	170	6
B.A.										
1899	...	...	...	200		5	...	6	38	4
1900	...	...	...	162		7	...	2	32	2
1901	...	...	...	182		6	4	4	40	2

CALCUTTA.

Examination.				Brahmins.	Non-Brahmins.	Muhamadans	Christians.	Brahmohs.	Buddhists.	Others.
Entrance	{	1899	...	1,050	2,001	239	146	22	47	22
		1900	...	1,139	2,129	287	123	29	52	16
		1901	...	954	1,916	226	129	20	42	18
B. A.	{	1899	...	138	259	27	15	16	6	2
		1900	...	168	315	24	12	7	2	1
		1901	...	135	195	21	10	9	7	1

* Includes Portuguese.

† N.B.—The Bombay University are unable to divide the figures between Brahmins and Non-Brahmins.

ALLAHABAD.

Examination.				Brahmins.	Non-Brahmins.	Muhammadans.	Christians.	Others.
Entrance (General)	...	1899	...	237	356	151	25	12
		1900	...	163	267	98	27	6
		1901	...	156	305	120	22	4
School Final ...	...	1899	...	50	112	21	4	4
		1900	...	50	111	16	7	5
		1901	...	63	125	12	8	3
B. A. ...	...	1899	...	42	84	39	7	1
		1900	...	32	57	30	7	5
		1901	...	42	87	31	14	1
B. Sc. ...	...	1899	...	...	...	...	...	...
		1900	...	1	5	...	...	...
		1901	...	1	2	...	...	...

PUNJAB.

Examination.				Brahmins.*	Non-Brahmins.	Muhammadans.	Christians.	Sikhs.	Others.
Entrance (General)	...	1899	...	98	396	250	21	103	1
		1900	...	146	480	355	25	144	...
		1901	...	191	540	331	29	116	1
Entrance (Science)	...	1899	...	1	10	3	...	1	1
		1900	...	1	5	...	3	2	2
		1901	...	3	7	1	4	2	...
Entrance (Oriental Faculty)	...	1899	...	...	1	7	...	1	...
		1900	...	2	...	9	...	1	...
		1901	...	...	1	7	...	...	...
B. A. Examination	...	1899	...	13	48	27	1	6	...
		1900	...	16	49	18	2	13	...
		1901	...	14	59	24	3	13	...
B. O. L. Examination	...	1899	...	...	...	2	...	...	...
		1900	...	...	1	2	...	...	...
		1901	...	...	2	2	...	...	...

* The Registrar states that the figures are not quite accurate.

MAHOMEDAN LEARNING.

Education among the Mahomedans of India in former times was of two kinds :—

- (1) Domestic or ordinary education.
- (2) Higher education.

Domestic or ordinary education was imparted at home. Well-to-do householders engaged the services of a teacher on board wages with the addition sometimes of a small monthly allowance in cash to instruct their children in reading, writing and arithmetic. Persian was the medium of instruction, and letter writing and penmanship were highly prized accomplishments. Neighbours of more moderate means were invited or allowed to send their children to the class which sometimes assumed the proportions of a small school. One or two of the senior boys were often chosen by the presiding pedagogue to help him in the teaching of the beginners, and not infrequently they developed into petty tyrants. In exceptional cases elementary Arabic was included in the course of instruction.

These schools were known as domestic Maktab, and those who taught in them were called "Moulvi Sahib" or "Munshi Sahib" as the case might be or more commonly answered to the sobriquet of "Meānji" or "Lalaji," terms which in this connection may be considered as the exact equivalents of the Scotch word "dominie." The profession was followed by both Mahomedans and Hindus alike. Kayasth Munshis often presided over Maktab in Mahomedan families and conversely Hindu families often employed Mahomedan teachers. But whatever might be his nationality the old Indian pedagogue was a character *sui generis*. Legends have gathered round him, and he is the hero of many a folk tale in all of which two principal types stand out in bold relief—the unmitigated tyrant, the dread of the Maktab, whom it was the pride and delight of the bolder spirits among his pupils to outwit, and the good natured but lettered fool who fell into every trap that was laid for him. But whatever type he belonged to his pupils were bound to do menial service for him and held him in respect. Custom permitted him to make free use of the cane or punish the delinquents in any other way his ingenuity might be able to devise.

The text-books were not always well chosen. One of the most popular in the old days is like the Decameron of Boccaccio unfit to be placed in the hands of youth. Writing was taught on oblong boards, or *takhteas* as they were called, covered with chalk which had to be washed clean after the lesson was over. The more advanced scholars wrote on highly glazed slips of country-made paper. Commercial arithmetic and book-keeping as practised in India formed part of the course of instruction in some Maktab. Prosody and elementary Rhetoric dealing chiefly with the figures of speech were favourite subjects at the more advanced stages. The most popular text-book on these subjects was one written by a Hindu author, and I think it is still in use.

Higher Education.—There was no public school or college for higher education supported by the State. State aid was confined to grants in land or cash to individual men of learning or to well known private schools attached to mosques or shrines. Higher education was in the hands of eminent men of learning who devoted themselves to the gratuitous instruction of youth. Several towns in India have at one time or another been noted seats of learning. Men flocked to them from all parts of India and even from Afghanistan and Bokhara to attend the lectures of specialists in Divinity, Logic, Metaphysics, etc. Landholders and nobles vied with each other in affording shelter to these scholars. They took in so many of them, each according to his means or his inclination, and provided them with board, lodging and oil for the lamps which lighted their midnight studies. Graduation was a ceremony marked with a certain amount of solemnity. The men of learning and other notable residents of the place met in a mosque or at the private residence of one of themselves, and the candidates were questioned in their presence by one of the teachers, or carried on a disputation on theses

chosen by them. Scholars who acquitted themselves creditably were called to have the turban of graduation placed on their heads by the chief Moulvi and to receive the congratulations of the assembly.

All these customs with slight variations prevail to this day, though specialists such as the great men who founded schools of Literature, Logic, Metaphysics, etc., at one time or another in different parts of the country are not to be found any more. Their place has been taken by Madrassahs or colleges of a more modern type organised by private piety or by means of endowments at different centres. The following list, which is not by any means exhaustive, will show that Mahomedans are taking pains not to loose touch with their old and cherished learning.

1. The Arabic Madrassah at Deobund. This is a well known and properly organised institution, very popular among Mahomedans. It receives a monthly grant of Rs. 100 from His Highness the Nizam of Hyderabad.

2—4. There are three Arabic Shools or Madrassahs in the town of Saharanpur.

5—10. There are six similar Madrassahs at Delhi.

11—14. Four Madrassahs at Meerut.

15—18. Two at Moradabad and two at Bulandshahr.

19—25. Amroha, Bareilly, Mozaffarnagar, Sambhal Moradabad, Lahore, Ajmer, Secunderabad (Bulandshahr district) have each a Madrassah.

26—27. There are two at Lucknow, one of which was founded lately by the association known as the "Nudwa." Here an attempt has been made to substitute a more modern syllabus for the time-honoured syllabus in vogue in Madrassahs of the old and conservative type. English is taught as a second language and more attention than usual is paid to Mathematics, History, etc.

28—29. There are two large Arabic Colleges at Hyderabad in His Highness the Nizam's dominions one supported entirely by the State and the other receiving a monthly grant of over seven hundred rupees. There are several other and smaller Madrassahs which receive no help from the State.

30—31. A large and well organised Madrassah at Ellore and one at Bangalore.

In Bengal there are five Arabic Madrassahs maintained by Government, besides private ones of which statistics are wanting. On the Bombay side the Borah community has private Madrassahs of its own in which, unlike Madrassahs in other parts of India, Arabic literature and language receive considerable attention.

The noteworthy feature about all these Madrassahs is that several of them are conducted more or less on the type of the school or college of the British Indian Educational Department, individual teaching and influence giving place to more or less systematic organisation. In some of them students are provided with gratuitous board and lodging by the foundation.

SYED HOSSAIN BILGRAMI.

MAHOMEDAN LEARNING.

Education among the Mahomedans of India in former times was of two kinds :—

- (1) Domestic or ordinary education.
- (2) Higher education.

Domestic or ordinary education was imparted at home. Well-to-do householders engaged the services of a teacher on board wages with the addition sometimes of a small monthly allowance in cash to instruct their children in reading, writing and arithmetic. Persian was the medium of instruction, and letter writing and penmanship were highly prized accomplishments. Neighbours of more moderate means were invited or allowed to send their children to the class which sometimes assumed the proportions of a small school. One or two of the senior boys were often chosen by the presiding pedagogue to help him in the teaching of the beginners, and not infrequently they developed into petty tyrants. In exceptional cases elementary Arabic was included in the course of instruction.

These schools were known as domestic Maktabas, and those who taught in them were called "Moulvi Sahib" or "Munshi Sahib" as the case might be or more commonly answered to the sobriquet of "Meānji" or "Lalaji," terms which in this connection may be considered as the exact equivalents of the Scotch word "dominie." The profession was followed by both Mahomedans and Hindus alike. Kayasth Munshis often presided over Maktabas in Mahomedan families and conversely Hindu families often employed Mahomedan teachers. But whatever might be his nationality the old Indian pedagogue was a character *sui generis*. Legends have gathered round him, and he is the hero of many a folk tale in all of which two principal types stand out in bold relief—the unmitigated tyrant, the dread of the Maktab, whom it was the pride and delight of the bolder spirits among his pupils to outwit, and the good natured but lettered fool who fell into every trap that was laid for him. But whatever type he belonged to his pupils were bound to do menial service for him and held him in respect. Custom permitted him to make free use of the cane or punish the delinquents in any other way his ingenuity might be able to devise.

The text-books were not always well chosen. One of the most popular in the old days is like the Decameron of Boccaccio unfit to be placed in the hands of youth. Writing was taught on oblong boards, or *takhtees* as they were called, covered with chalk which had to be washed clean after the lesson was over. The more advanced scholars wrote on highly glazed slips of country-made paper. Commercial arithmetic and book-keeping as practised in India formed part of the course of instruction in some Maktabas. Prosody and elementary Rhetoric dealing chiefly with the figures of speech were favourite subjects at the more advanced stages. The most popular text-book on these subjects was one written by a Hindu author, and I think it is still in use.

Higher Education.—There was no public school or college for higher education supported by the State. State aid was confined to grants in land or cash to individual men of learning or to well known private schools attached to mosques or shrines. Higher education was in the hands of eminent men of learning who devoted themselves to the gratuitous instruction of youth. Several towns in India have at one time or another been noted seats of learning. Men flocked to them from all parts of India and even from Afghanistan and Bokhara to attend the lectures of specialists in Divinity, Logic, Metaphysics, etc. Landholders and nobles vied with each other in affording shelter to these scholars. They took in so many of them, each according to his means or his inclination, and provided them with board, lodging and oil for the lamps which lighted their midnight studies. Graduation was a ceremony marked with a certain amount of solemnity. The men of learning and other notable residents of the place met in a mosque or at the private residence of one of themselves, and the candidates were questioned in their presence by one of the teachers, or carried on a disputation on theses

chosen by them. Scholars who acquitted themselves creditably were called to have the turban of graduation placed on their heads by the chief Moulvi and to receive the congratulations of the assembly.

All these customs with slight variations prevail to this day, though specialists such as the great men who founded schools of Literature, Logic, Metaphysics, etc., at one time or another in different parts of the country are not to be found any more. Their place has been taken by Madrassahs or colleges of a more modern type organised by private piety or by means of endowments at different centres. The following list, which is not by any means exhaustive, will show that Mahomedans are taking pains not to loose touch with their old and cherished learning.

1. The Arabic Madrassah at Deobund. This is a well known and properly organised institution, very popular among Mahomedans. It receives a monthly grant of Rs. 100 from His Highness the Nizam of Hyderabad.

2—4. There are three Arabic Shools or Madrassahs in the town of Saharanpur.

5—10. There are six similar Madrassahs at Delhi.

11—14. Four Madrassahs at Meerut.

15—18. Two at Moradabad and two at Bulandshahr.

19—25. Amroha, Bareilly, Mozaffarnagar, Sambhal Moradabad, Lahore, Ajmer, Secunderabad (Bulandshahr district) have each a Madrassah.

26—27. There are two at Lucknow, one of which was founded lately by the association known as the "Nudwa." Here an attempt has been made to substitute a more modern syllabus for the time-honoured syllabus in vogue in Madrassahs of the old and conservative type. English is taught as a second language and more attention than usual is paid to Mathematics, History, etc.

28—29. There are two large Arabic Colleges at Hyderabad in His Highness the Nizam's dominions one supported entirely by the State and the other receiving a monthly grant of over seven hundred rupees. There are several other and smaller Madrassahs which receive no help from the State.

30—31. A large and well organised Madrassah at Ellore and one at Bangalore.

In Bengal there are five Arabic Madrassahs maintained by Government, besides private ones of which statistics are wanting. On the Bombay side the Borah community has private Madrassahs of its own in which, unlike Madrassahs in other parts of India, Arabic literature and language receive considerable attention.

The noteworthy feature about all these Madrassahs is that several of them are conducted more or less on the type of the school or college of the British Indian Educational Department, individual teaching and influence giving place to more or less systematic organisation. In some of them students are provided with gratuitous board and lodging by the foundation.

SYED HOSSAIN BILGRAMI.

THE MAHOMEDAN UNIVERSITY.

If the Mahomedans of India were a united people, conscious of a community of interests and accustomed to work in concert in all matters that concerned the common weal of the community, an institution like the Aligarh College, which contains the nuclei of all the separate elements which go towards the constitution of a teaching University, might well be left to develop into one in natural course of evolution. But the Mahomedans of India are not a united people and their conception of their best interests is as divergent as the localities in which they live. It is, therefore, to be feared that, if left to itself, the Aligarh College would not only not develop into anything higher, but would in all probability degenerate into an ill-taught and worse disciplined *maktab* of the old type, if it does not altogether cease to exist. It is, therefore, necessary for Mahomedans of light and leading in all parts of India, who would look upon such an event as little short of a national calamity, to contribute towards the preservation and further development of the only national institution they possess by helping it in every way in their power.

It has sometimes been said, and will probably be said again, that if the Government colleges are good enough for Hindus, they ought surely to be good enough for us, and that it is a work of supererogation on our part to seek to establish an institution of our own. But I am not at all sure that we have seen the last of what our Hindu brethren are prepared to do for themselves. They have hitherto lain under the glamour of political aspirations kindled by the unwise procedure of their leaders, and have not been able to look to their more practical needs. I feel quite certain that, when they once perceive that the direction which they are trying to give to their national energies leads to a *cul de sac*, they will turn their attention to social and educational reforms in which, I hope, they will have the sympathy, and if need be the help, of all right-minded Mahomedans. We may rest assured, however, that once their attention is awakened in this direction, they will not be hampered with difficulties that well nigh broke the heart of the great man, and true patriot, who was the leader of the movement we see in full force to-day, and who laid the foundation of the noble institution which we wish now to enlarge and improve. Instead therefore of citing their example in favour of inaction, we should be proud of having in this one instance stolen a march over our Hindu fellow-subjects and made a good start on the road to an independent intellectual career of our own. For, leaving other considerations aside, whatever one does for oneself, any worthy end attained by strenuous exertions of our own, at the cost of generous self-sacrifice and with wise disregard of the pleasures of the passing day, and provident forethought of the needs of a near or distant future, is for the very reason of the effort and sacrifice involved, much more valuable to an individual, and still more so to a people, than eleemosynary gifts from another even though that other be the Ruling Power of the State.

There are, however, various other considerations pointing to the need of a well-equipped educational institution of our own. The universities of Bengal, Madras and Bombay were chartered a little less than half a century ago on the model of the London University of those days, and have, in spite of the limits within which their sphere of usefulness was confined, done good work in their way. But limited as their scope was to the holding of certain stereotyped examinations, the schools and colleges that sprang up to carry out their behests, necessarily began with coincident limitations, and, as was only natural, crystallised into institutions for the manufacture of graduates. Distinctions that in their attainment involve no physical exertion or peril of life or limb, have a peculiar attraction for the weaker races, and they were all the more eagerly sought after, because they served as passports to employment and power. In a short time University degrees attained a market value perhaps unexampled in the history of the world, the art of cramming came into existence, and the compilation of cribs, notes, abstracts and other mnemonic devices rose to the dignity of a profession. The popularity of a lecturer came to depend not on the width of his attainments or the excellency of his teaching, but on the number of candidates that under his training obtained passes at the various examinations prescribed by

the universities. If a scholarly teacher, and of these there is no lack in our colleges, ever felt tempted to leave the beaten track and teach a subject instead of teaching a text-book, he soon discovered that his pupils were intent not on listening to his exposition, but on reading cribs and note-books of their own under the cover of their desks. The thousands who flocked to our High Schools and affiliated colleges, lived where they could, most often in environments and exposed to influences little calculated to foster excellence of conduct, purity of morals or cleanliness of life. There was no tie between them except the University examinations; to parody a common saying, it was a case of every one for himself and the examiners for all. There was no common school life, no field for the cultivation of the more generous impulses of youth, no foundation for the exercise of discipline that goes towards the formation of character. It was not an uncommon experience to hear native gentlemen of the old school express their horror of the arrogance, conceit and want of manners betrayed by children of gentle birth after even a short sojourn in these institutions, accounting to a considerable extent for the reluctance which Mahomedans of the past generation felt in giving their children the benefit of an English education.

So patent were these evils and so obtrusive their results that one of our ablest Viceroys took the matter into serious consideration, and issued a circular which is only memorable now for having led to nothing. There was a little talk at the time about moral text-books, as if morals and manners could be tested by competitive examinations, a futile attempt in one or two instances to enforce discipline, and there was an end of the matter. Laudable as the effort was, it failed, because the root of the evil was left untouched. Discipline is the foundation and more than half the superstructure of culture, and discipline was impossible under the system that had taken deep root amongst us. Things were so ordered that, provided our youths passed their University examinations, it mattered little to them what else they did or did not do. Degrees led to preferment and power, and it was degrees, therefore, that were desired at whatever sacrifice of physical or moral health. The kind of life, and of toil and effort that this involved, has committed fearful havoc among our youth, sending many a weakling to an early grave, and destroying in many of even the more robust the germs of all healthy and vigorous physical and mental life. And the result has been helped by the character of the tests appointed by the universities, making no allowance for individual idiosyncracies, and paying no regard to the natural bent of different minds.

There will always be some endowed with native vitality and force too great to succumb to the strongest adverse influences, but the effect on the generality of our youth has been disastrous. I will not venture to estimate what percentage of them turn out really capable men, but no one will deny that the majority are singularly devoid of the many-sidedness, the *savoir faire*, the "sweetness and light," the power to assimilate experience, which we are accustomed to look for in a cultured man; and it is well to observe here, that these are the very qualities which a corporate school life under wholesome discipline is calculated to foster. We educate our sons not to turn them into book-worms of the cloister, but to enable them to make an energetic use of their lives and of such powers as heaven has given them. But our colleges turn out youths more fit to shine in the one rôle than in the other. They seem to develop no power of observation, or of a just criticism of life, no artistic aptitude, no sense of proportion, none of that capacity so useful in the battle of life, of putting themselves in the position of others in order to deduce a right view of themselves and their merits. One practical issue of this arrested development is the disastrous mess many of our educated countrymen make of their politics in allowing themselves to be deluded with aspirations singularly out of tune with the whole tenor of their political position and their just political claims. Another is their incapacity to form a correct estimate of the responsibilities and natural limitations of the Empire to which they belong. A more vigorous and versatile training, a healthier and manlier use of the opportunities of youth would have saved them from these errors and given them a juster view of their rights and duties.

To turn to another side of the question, we are perhaps the only people in the world, who have submitted without protest to a system of public education divorced from religion. It is not necessary to be a professedly religious man to

perceive that the weakening of the sanctions provided by religion, strikes at the root of national life, and that a loss of reverence is premonitory of national degeneration. The State has gone out of its way to act as a pioneer of higher education, but it cannot teach us morals or religion. In an Empire like that of India, which is made up of a congeries of States and communities widely divergent in character, language and religion, the very existence of a great controlling Power must of necessity depend on the observance on the part of that Power of a policy of strict neutrality. It is for us, not for the State, to see to our own national needs and provide ourselves with the means of progressive national development. Is it not enough that our lines have fallen under a Government ever ready to stretch out to us a friendly hand of no uncertain helpfulness, if we will only prove that we are prepared to help ourselves. In what other Asiatic kingdom do the subject-races enjoy such unfettered freedom of action, such a boundless field for expansion, or such unstinted sympathy from the State in all useful directions of human activity?

We have, therefore, no reason to relax—on the contrary, we have every reason to redouble—our efforts in the direction of providing a proper seat of learning for ourselves untrammelled by conditions inseparable from State direction, and better suited to our national wants than universities based upon strictly neutral and secular lines can ever be. We, Mahomedans, have hitherto maintained an attitude of reserve towards the learning of the West as dispensed to us by State institutions, and we had, perhaps, our reason for doing so. The men of learning amongst us, our Logicians, Metaphysicians and Jurisconsults of the old school, saw samples of the new learning only in the raw, half-educated youths turned out of our schools and colleges, and hastily concluded that it was, like them, eminently superficial. The utmost concession they were prepared to make was, that the Westerns excelled in the “hikmat-e-amali” (practical sciences) which have never been held in high esteem by schoolmen of either the East or the West, but they scoffed at their “hikmat-e-nazari” (speculative sciences) and believed that they were not even known to them except in the most crude and elementary form, and that, at least in this most important branch of learning, the East could still give lessons to the West. There are learned Mahomedans in all parts of India, who still believe that the skill of European nations is confined to the building of great railways, warships, formidable guns and other infernal machines, and that they have no aptitude for the sciences which deal with abstract subjects or the phenomena of the mind. And this ignorance will not be dispelled, or the ground cleared for the reception of the splendid heritage which our Western rulers are willing to share with us, unless we set to work and complete the task we have begun. And what we are about to undertake is nothing new or isolated, we are only carrying on, on the banks of the Ganges, work that was initiated on the banks of the Euphrates twelve hundred years ago. It is true that the learning and wisdom that our rude and warlike ancestor borrowed from Europe in Bagdad in the day of the great Abbasides, they gave back with interest at Cordova under the great Omaide Kings of Spain. Are we, then, to hold aloof now, from a sentiment of false pride as suicidal as it is base, if the pendulum has swung back and we find ourselves again in the position of those to whom the rich storehouse of Philosophy and Science was opened for the first time? Indeed, if the lessons of the past have not been lost on us, we ought to be wiser in our generation, and instead of being content with the partial and second-hand teaching to which alone our ancestors had access, we ought to go to the very fountain-head of the new learning, and assimilate as much of it as we can, instead of absorbing it indiscriminately and in an indigestible form, as some of us have hitherto been content to do.

These ends, however, will never be attained, unless we part company at the threshold with the stereotyped system of learning by examinations which the old universities of Bengal, Madras and Bombay have brought into vogue, and build our new *Alma Mater* on the lines of the venerable seats of learning that have made Oxford and Cambridge famous all over the world. The nucleus of a corporate school life exists in the boarding arrangements of the Aligarh College, let it be expanded so as to furnish residence, say, for a thousand youths. We have three European Professors living within College bounds, and intimately

associated, as they should be, with the resident students. Let their number be increased until we have a competent European Professor for every branch of Western learning that we wish to cultivate, and a tutorial staff that may in time be partly recruited from among the Graduates of our own University. But we must always have not merely a good leaven, but an actual preponderance of highly paid European Professors and tutors, at any rate for a very long time to come. On this one point there must be no delusion. If any one offers us a different advice, if we are told, for example, that where native graduates are available, we need not go to the expense of engaging Englishmen on high pay to teach us, we may rest assured that the advice proceeds from absolute ignorance of the very rudiments of Western culture. I hope the leaders of the present movement will not give ear to such counsel. In any scheme for the institution of a national University on the model of Oxford or Cambridge the allotment of funds sufficient for the employment of an ample staff of well paid European Professors and tutors, and the maintenance of a carefully devised system of discipline are the two essential points, the rest is of secondary importance and a mere question of detail. It is no doubt possible to secure the services of excellent native masters for about a fourth of the salary that will have to be offered, if we resolve, as I hope we shall, on securing competent English scholars to help us in developing the scheme, but between the two there will lie the whole difference between substance and shadow, between reality and sham. The best of Native teachers, among whom, let it be freely admitted, we count some ripe scholars and most admirable men, can only impart to us the knowledge and culture of the West at second-hand. Nothing but close and constant contact with European scholars and gentlemen will penetrate through the almost impermeable crust of sloth, prejudice and ignorance which has accumulated on the Mahomedans of India, during the inglorious period following the palmy days of their dominion. Our youth need to be taken out of their homes and home surroundings, and placed in uninterrupted view of high ideals, of which they can form only a faint and distant conception from the study of text-books for the passing of examinations. It is only by intimate association with living men of high scholarship, good manners and pure life, that they can be expected to learn to value these qualities and exert themselves to attain them. It is in their leisure hours, in the refectory and on the play-ground, more than in the lecture-room, that the best part of the education of youth, that which influences character, is really carried on. It is there that the lessons of unselfishness, fair dealing, pluck, habits of truth, manly pride and obedience are to be learnt, lessons without which the learning of an Aristotle or an Averrose were vain and valueless.

But we should be doing less than well for ourselves, if in fitting up a place for the cultivation of Western sciences we were to neglect the vast stores of valuable thought that we have received as a heritage from our own ancestors. No one can hope to be able to interpret the West to the East, to graft Western on Eastern culture, who is not familiar with both. A finished European scholar will be able to do well for himself, but he will be able to do little for the mass of his countrymen and co-religionists, if he cannot bring home to them the precious knowledge of the West in terms of Eastern learning. We need some scholars who will make it their business to effect a reform in the modes of ratiocination stereotyped among our school-men by exposing its fallacy. This is the only way in which we can hope to penetrate into the very ark of the citadel of sophistry and verbiage with which ages of blind faith in medieval methods have encrusted our philosophy of knowledge. We need men able to give our own old-world Moulvies a newer organon than that of Aristotle and Averrose, and introduce them to the more fruitful tests of truth which Modern Science has placed in our hands.

We have hitherto had no one to do this service for us, for the simple reason that few have interested themselves in such recondite issues, and those who have, to them the instrument and the means have been wanting. I know of only two Mahomedans who have made an attempt in this direction, one of whom died before he had taken more than the first step, and the other, his son, is still in the full vigour of youth, and from him we have reason to expect much fuller work than he has hitherto set forth. To them—to the father as well as

to the son—was given the divine gift of a vigorous mind stored with what is best both in Eastern and Western learning. It remains to be seen, if the survivor will have the leisure to devote to the task which remains to be done and which he alone, perhaps, of all living Mahomedans is able to do.

I have no sympathy, however, with those who would organise a distinct Faculty of Oriental learning in connection with the Mahomedan University. We may rest assured that Mahomedans left to themselves will never let their old learning die. We have well found schools at Deobund, Arrah, Hyderabad and other towns, where Mahomedan learning is kept up as it should be, and a movement has recently been set on foot for a more systematic inculcation of it which commands the sympathy of all right-minded Mahomedans. The University should, in my opinion, confine itself to a combination of Western culture with that of the East as represented in their language and literature (Arabic, Sanskrit and Persian), specialists being encouraged to go deeper into them after a certain stage of University education which can be determined in working out the details of the scheme. If we had amongst us a public spirited philanthropist and patriot like Mr. Tatta of Bombay, or the late Sikh nobleman in the Punjab, we might listen to those who would institute a distinctly Oriental side in the University. But as it is, I think we shall have reason to congratulate ourselves, if we succeed in raising the ten lakhs to which the memorial Committee has modestly confined its expectations. Let us not dissipate the little we may collect in an attempt which, if successful, is not likely to help us much towards the progress and advancement which are, at the present moment, most needed and most to be desired.

It will serve no useful purpose at this early stage of the movement to enter into details or draft a complete scheme for the proposed University: this is a work for which a Sub committee will have to be appointed, when funds have been provided, and practical operations have to be commenced. But it will not be out of place to remark here that the University will be incomplete, if, like the Aligarh College, it is not able to found a Faculty of Physical Science and Biology with properly fitted up laboratories for the experimental exposition of the different studies that group themselves round them. I have singled out this Faculty for special mention, because I hold that there is no discipline more suited to correct the peculiar errors of the Mahomedan mind than a study of these branches of knowledge in the light of modern methods. If we have to commence work only with the minimum number of Faculties, this group should, I think, in any case be one of those selected. There are four others that are in my opinion equally indispensable, namely :—(I) Languages, (II) Mathematics, (III) Philosophy and Logic, (IV) History, Political Science and Economics. These five, to begin with, should furnish a sound foundation for the young University. Law is another indispensable discipline, but for this we can afford to wait until funds can be spared; we can also afford to wait for the European Classics and Modern Languages groups; I do not think they are essential.

In spite of what I have said about Oriental learning, I do not think I would make the higher study of Arabic, Persian or Sanskrit compulsory on all, but I would encourage it by holding out valuable pecuniary rewards; as for that matter I would encourage all specialization and thoroughness of study, be it in a group of cognate languages, or in some special branch of Science or History. For, every Graduate need not be a profound Oriental scholar, any more than every Graduate need be a Scientist or a Mathematician. Our aim should be to encourage all branches of learning, leaving each under-graduate free to choose according to his natural bent of mind.

It remains to be asked, in conclusion, what is to be done with the School Department now attached to the College? I for one see no reason for making any change. As the College grew out of a school, so will the University grow out of the College by what may be likened to a process of gemmation from within. The College will remain and so should the school. When the number of under-graduates has outgrown the accommodation available in the Boarding Establishments already in existence and we are pressed for room, it might be housed separately with an independent establishment of its own, but still under the eye of the University authorities. The influences that will be brought to

bear on under-graduate life should not, I think, be denied to the school in which they are supposed to receive their preliminary training at an age much more impressionable than when they enter the University. In fact, the school ought to be kept in an increased state of completeness of equipment and efficiency as a model for other Mahomedan schools that wish to act as feeders to the higher institution. School work even at Aligarh is by no means what it might be, if only funds could be spared for its improvement. There is room for the introduction of many of the more modern methods of training, such as the Kindergarten, manual training, etc., and the employment of increased European agency, specially that of European lady-teachers in the manipulation of infant classes. But all this is a question of funds. For the present our last word and final resolution in this connection should obviously be to make everything subordinate to the foundation of the University.

In hazarding the preceding observations I have taken it for granted that out pattern has already been chosen, but in reality we have three to choose between, namely, the Universities of London, Edinburgh and Oxford or Cambridge. I need say nothing about the first, because the promoters of the scheme seem all to be of one mind in discarding the system which that University represents as unsuitable to our needs. Edinburgh is something between London and Oxford; for, unlike London, it is a teaching not a mere examining University; and yet, unlike Oxford and Cambridge, it does not attempt to guide or influence under-graduate life. We, however, want something more than this, we want our youth influenced to high issues, their lives moulded after the best European models of excellence, and their mental and moral tendencies guided towards lofty ideals. We shall do wisely, therefore, to follow Oxford or Cambridge and copy on a modest scale the methods that have helped to mould the national life of the greatest and most civilised country in the world. Now, the main feature of these Universities and the secret of their success lies in the tutorial system of training to be found in the Colleges grouped round them. Each college has a staff of tutors, one for every branch of study encouraged within its precincts. His functions are threefold; he lectures on the subject which he has made his own; helps in the internal government of the college; and acts towards the under-graduates as their guide, philosopher and friend. In this capacity he is constantly accessible to them; often has some of them come over to tea or breakfast; hears them read their weekly essays or translations to him, and in other ways gives them assistance and advice in their studies. He encourages them to converse freely with him on politics, literature or art, pointing out their errors or otherwise influencing or guiding their thought. They are able to take to him all their little difficulties, because he has their confidence, and they know that they have in him both a teacher and a friend. and as the tutors are generally men of profound learning, high ideals and loftiness of character, and as an undergraduate comes in contact with several of them in the course of his studies, it follows that, by the time he takes his degree, he has unconsciously imbibed, according to his temperament and capacity, some at least of the good to be found in each and all.

But even a tutorial staff like that of the great Colleges of Oxford or Cambridge would be of little avail, if there was no discipline among those placed under their care. In a corporate community collected together for some common pursuit, there must be, as the first condition of success, strict obedience to the laws of the community, and the necessity is all the greater, when the community consists of youthful individuals, with callow and unformed minds, brought together for the purpose of education. We must, therefore, have rules and regulations carefully devised, not by outsiders ignorant of the aims and objects of modern education, but by men who have themselves received and are capable of imparting the highest culture of the day. And rules once framed must be strictly carried out without outside interference of any sort or kind.

Going back for a moment to the subject of Oriental studies, may I be allowed to add that, while deprecating any attempt to burden the University with the dead-weight of a purely Oriental Department, I would lay every possible stress on thoroughness of work in the Oriental studies taken up in combination with English and other subjects. I have hitherto carefully abstained from entering into the details of the scheme, because these, in my opinion, should be

left to be worked out by a committee of experts appointed in that behalf, but I hope I shall be pardoned, if I venture to point out here what seem to me to be the line and direction which Arabic studies should take in a Mahomedan University. For an ordinary scholar who took up the combination, I think it would be enough, if he acquired a fair knowledge of the language and its literature: in other words, if he was able to read and write in classical Arabic without difficulty. But for specialization in this branch, I would suggest four alternative courses:—

I. Arabic Language and Literature including higher Grammar and Rhetoric, History of Literature, Bibliography and Philology.

For this school, as it may be called, I would suggest the following books among others:—

Mugni and *Mofassal* with their commentaries.

Agani. *Al-kamil* of *Mobarrad*. The *Koran* with commentaries.

Motawal. All the Poets of the first and second period.

Nahjul-Balagat with the great commentary of the *Motazali*.

Hadith as in some one of the six collections.

The prose works of *Imad-e-Katib*. Other names can be added, but these will suffice to indicate the direction such studies should take. For Philology recourse must be had to European works on the Comparative Philology of Semitic Languages.

II. Mahomedan History including Biography and Bibliography. The reading for this subject should include the works of *Ibn-e-Hisham*, *Tabari*, *Ibn-e-Athir*, *Mas'udi*, *Ibn-e-Khaldun*, *Ibn-e-Khallakan*, and some of the available *Tabakat*, *Hadith* being consulted for side-lights.

III. Philosophy and Logic. I think the attention of the student should, in this branch, be confined to the older writers, such as *Ibn-e-Rushed* (Averrose), *Abu Ali ibn-e-Sina* (Avicenna), *Mulla Bakar*, *Tusi*, *Sadr-ud-din* and others.

IV. Theology.

This should obviously include a thorough acquaintance with the *Koran* and its chief commentaries; *Hadith* as represented in the six principal collections; Law and Jurisprudence. Attention should be specially directed to controversial questions of importance, such as the limits of Authority and Reason according to different schools; the authenticity of historical and traditional evidence; and similar other matters of importance in laying the foundation of a new school of criticism and thought. Let me add that no study in this school would be complete that does not include an intelligent historical survey of the doctrine and practice of Sufism.

Apart from this school, practical, religious teaching should to some extent form part of the general education of all Mahomedan youths, taking in only the essentials, and leaving doctrinal details and controversial matters to specialists. Mahomedanism is a very simple faith, there is nothing mysterious or recondite in its creed, nothing complex in its ritual. All that is really necessary could be brought together within the compass of a couple of pamphlets of moderate size, in the Hindustani language, which schoolboys could learn before advancing to higher studies. Nothing would remain to be done except to make the observance of all obligatory religious commandments part and parcel of the scheme of collegiate discipline. It would in my opinion be a grievous error to insist upon anything more elaborate except in the case of students who take up the theological school. I venture to think these limitations are quite consistent with the best Mahomedan teaching of the day, and will, I hope, be accepted by those who will, by their position, have an influential part in shaping the course of the University.

I submit these observations to the members of the Memorial Committee and the Mahomedan Educational Conference of Lahore with a considerable amount of diffidence, because I am aware that among them there are gentlemen of light and leading much better fitted to shape the course of future Mahomedan

culture, and with a much better title to lay down the law that should govern our future educational policy. What I have ventured to put before them are merely tentative suggestions, contributions to the fuller discussion of the subject by abler and more experienced men than myself.

SYED HOOSAIN BILGRAMI.

HYDERABAD, DECCAN,

23rd December 1898.

}



**NOTE ON THE ESTABLISHMENT OF A TEACHING
UNIVERSITY IN CALCUTTA.**



सत्यमेव जयते



सत्यमेव जयते

NOTE ON THE ESTABLISHMENT OF A TEACHING UNIVERSITY IN CALCUTTA.

THE object of the following remarks is to indicate the necessity of the extension of superior or University education in Bengal, and to propose certain changes in the constitution and working of the Presidency College which will practically convert it into a teaching University.

To the note are added two short memoranda which were written by us separately a short time ago, and which were then submitted to the Director of Public Instruction. The first note (Appendix A) reviews briefly the present state of education in this country, and points out the direction in which the Government work in education should tend in the future. It also deals with the qualifications which are required for the members of the Government Education Department, in order that they may effectively carry on such schemes of education as are suggested in the present paper, and thus forms an appropriate explanatory note to it. Appendix B is a memorandum on Technical Education, in which it is proposed to affiliate a Central Technical Institute to the Presidency College, and which would thus enable a commencement to be made in the direction of the much-needed technical instruction of the middle and lower classes in Bengal.

The ideal scope of a liberal and generous education is to enable men to use the full compass of their mental faculties and powers, and to acquaint themselves with the energies and forces of nature, and the limitations imposed by nature on their utilization and employment in diminishing manual labour and increasing material comfort. The first-half of the field of education hence includes such subjects as language, literature, psychology, sociology, pure or abstract mathematics, &c., and the latter applied mathematics, the natural and physical sciences, political economy, medicine, &c., &c. The two groups are sometimes distinguished by the terms humanities and realities.

Every member of a society or community requires education to make him an efficient and intelligent member, and it is the interest of the whole body that every member should receive a sound and effective education adapted to his position, and hence determined partly by the condition of the society, and partly by his own character and ability. It is hence the duty of the Government, as representative of the society collectively or as a whole, to secure by the simplest and most direct means, proper and efficient education for all classes, and to place it within the reach of every member from the lowest to the highest.

It may be premised that English systems of education have hitherto been very unmethodical and costly, and also more or less unsatisfactory. The favourable results are not due so much to the methods as to the innate force and character of individuals. The tendency of statecraft in education in England has hitherto been, on the one hand, to exalt examinations and degrade teaching, and on the other hand, to deprive the lower classes of liberty and freedom in the education of their children, whilst continuing it to the middle and upper classes. It is not in England, but in countries such as Prussia and Switzerland, poorer in accumulated wealth, and also probably in talent and undeveloped intellect, that national education is conducted on an intelligent and orderly system. It is the organized system of education which has placed Germany in its position of the greatest scientific nation of the world, and which is now enabling it to compete successfully with England in commerce and manufactures.

The educational systems and institutions of India should rather be modelled upon those which have produced such great results in Germany, &c., and at a moderate cost, rather than upon the rich educational corporations of Oxford and Cambridge, or upon the London University which ignores teaching and adopts an examination test as the sole qualification for a degree, or upon the English state system of primary education, one feature of which is that sick and helpless parents can be fined or sent to gaol if their children labour to procure food for them instead of going to school.

A complete national system of education, adapted to the conditions of modern societies, has three stages—

- 1st.—Primary education, which includes that acquaintance with the elements of knowledge that the humblest ought to possess, and beyond which his means and position will not usually allow him to pass, unless he has more than ordinary ability, ambition, and strength of character.
- 2nd.—Secondary education, which includes that general culture and mental discipline that is now recognised as essential in all civilized countries for the formation of character, and as a preparation for the intelligent performance of the duties of life. It may hence also include an acquaintance with the principles underlying the handicrafts and arts practised in the country, or what is now called technical education.
- 3rd.—Superior or University education, which comprises the highest form of culture in the arts, literature, and sciences; and qualifies (so far as education as supplementary to character can do so) its members for the highest positions in the State, whether it be in the professions of law, medicine, instruction, literature, original scientific research, government, &c.

The system of primary and secondary (including collegiate) education at present established in India is the outcome of the important educational despatch of Sir Charles Wood, of 1854. Education has undoubtedly made great strides since that date. Schools and Colleges have multiplied. Students have increased in numbers to such an extent that native private enterprise has stepped in, and gives an education independent of State aid and similar in character to that which could only be obtained in Government or missionary colleges ten years ago.

Education in India nowhere rises appreciably above the secondary stage. College teaching up to the B.A. standard is conducted on the same general methods and with the same general aims as high school teaching. There is no University teaching in the proper sense of the word. College professors are simply teachers of advanced classes. They do not utilise their subject as a means of mental discipline, and students are, as a rule, as dependent upon their professors, and as destitute of self-reliance and power of independent thought at the end of their college career, as at the beginning. Their minds are rough and unformed, as they have only been taught with the sole object of passing examinations. The present Calcutta University is a mere examining and degree-conferring corporation, and performs its functions very unsatisfactorily. There is, for example, a conspicuous absence of fixed principles in the regulation of its courses, the selection of its examiners, the moderation and revision of the examination papers and marks, due primarily to the rapid changes in its directing and controlling body—the Syndicate. The standards of examination vary from year to year to such an extent as to partially justify the permanent dissatisfaction prevalent amongst students, and the occasional protests of professors and principals of colleges. It adds in no way to knowledge. It has not collected round itself a body of learned men, who might have formed a centre of intellectual activity. There is not a single great name associated with it, or representative of its culture. Its importance is great, but is not founded on its own merits or achievements. It is based solely on the fact that its degrees and certificates (official and non-official, amongst the latter of which are those that are known as the B.A. fail and M.A. fail) are the passports for admission to Government service and the professions. It is hence enabled in a country like India, where those are practically the sole objects of education, to control autocratically education throughout the whole of Northern India to an extent unequalled in any other country. It is the greatest living embodiment of that false principle in education, fostered chiefly by English statesmen of the past 30 years, that education is subsidiary to examination, and not examination to teaching. In Germany, the Government and the people equally recognise that examinations are a very feeble and defective test of rational culture. They act on the true principle that the discipline of a thoroughly good school or university provided with efficient teachers or

professors is far more reliable than an examination test ; and hence while they do not reject the latter, their great aim is to establish and maintain schools and universities of the highest character, and to obtain and retain in their educational service the ablest men. Matthew Arnold's remarks on this point are deserving of the fullest consideration. He says : " Examinations preceded by preparation in a first-rate superior school with first-rate professors give you a formed man. Examinations preceded by preparation under a crammer give you a crammed and not a formed man. I once bore part in the examination for the Civil Service, and I can truly say that the candidates to whom I gave the highest marks were almost without exception candidates whom I should not have appointed. They were crammed, not formed men. The formed men were the public school men who were ignorant of (that is, not specially prepared for) the subject of my examination, viz., English literature." It is not too much to assert that nine-tenths of the teaching in the colleges of India is cram, pure and undiluted ; and such an education is utterly valueless for the formation of character and the cultivation of gentle manners, or for mental discipline and culture.

The present system of education in Bengal is very imperfect. Primary education is in its infancy. The Government have recently taken into consideration the subject of technical education, and thus tacitly acknowledged one very important defect in secondary education. The proposal which has been made for the creation of a Central Technical Institute is intended to remove an obvious blot in the higher scientific teaching of the colleges. A scheme which was submitted to Government some months ago for the establishment of a Central Training Institute, and its affiliation to the Presidency College, is given in full in the appendix to this memorandum (Appendix B). There are other defects equally large and glaring. There is, for instance, no proper provision for the education of the well-to-do classes. In India, quite as much as in England, there is a strong feeling amongst the upper classes that manners, quite as much as knowledge, makes the man. The fees charged in the great majority of colleges and schools are extremely low—less than in any other civilised country we believe,—and hence they are open practically to all except the very humblest and poorest members of the community. The habits and manners of some of the students are not such as are current in good society either in India or in England. This occasional defect in native students is well known, and is quite as obnoxious to natives of the middle and upper classes as to Europeans, and is one of the strongest objections to the present system of collegiate and English education. Hence the upper and more respectable middle classes are debarred from the higher education established and fostered by Government, and are compelled to employ private tutors for their sons. They thus lose one of the great humanizing influences of a public education, and the social discipline, such as that of the large English public schools, which accompanies association with their equals during the period of formation of character. Again, the courses prescribed by the University, and the arrangements connected therewith, are open to many strong objections. The ordinary course—that for the B.A. degree—requires four years' study at an affiliated college, and only a small proportion of those who pass the Entrance Examination (about 20 per cent.) obtain the B.A. degree. On the other hand, the higher or honour courses for the M.A. degree can be obtained about a year after the B.A. degree, and 60 or 70 per cent. of those who attend the M.A. classes in the Bengal affiliated colleges succeed in passing the examination and qualify for the degree. Four years' college training are necessary to acquire the general culture of the ordinary or B.A. degree, whilst barely twelve months are considered sufficient to enable students to acquire that special and intimate acquaintance with a group of subjects, such as mathematics or the physical sciences, which will qualify them for the M.A. degree. The effect of this ridiculously low estimate of what is necessary for superior education in mathematics and the physical sciences can be easily imagined. It gives students an utterly false estimate of their abilities and learning. It tends to degrade the higher science teaching, which might be used very effectively to develop mental faculties and powers, that have hitherto been more or less dormant in the Native mind, into a process of rapid and judicious cramming. That the superior

education in Bengal is generally considered to be unsatisfactory and imperfect is shown by the following facts:—

- 1st.—The Government of India finds it advisable, if not necessary, to send students to England at great expense for general as well as for special education, as, for example, agricultural scholars, State scholars, &c.
- 2nd.—A steadily increasing number of Indian students find it to their advantage to proceed to Europe for purposes of study and with the view to take English or foreign degrees.
- 3rd.—A large proportion of the native gentlemen who have given evidence before the Public Service Commission have urged that natives who compete for posts in the higher branches of the public service should as a necessary condition have been educated partially in England.

It will thus be seen that the higher education based on the requirements of the Calcutta University for the M.A. degree is as unsatisfactory as it is pretentious, and that it continues in the highest stages of the education it dominates the worst feature of Indian education, cram, by proposing an extent and range of subjects which cannot be mastered by an ordinary student in the assigned time. There is, in fact, no higher education such as can be obtained in any of the larger German or Swiss Universities, or even in the older Scotch and English Universities. The only remedy that the Government has tried for this defect has been to offer inducements, direct and indirect, to students to go to England for study and scientific training. It is certainly one way of overcoming the difficulty; but the simpler and more direct way would be to bring the opportunities for higher education home to students in India. This is especially desirable in India. It is advisable as a general principle that the educational system established in any country should be as complete as possible, and that it should provide for the wants of the wealthy and the talented members of the society as well as those of the poor and unintelligent, and it should not be absolutely dependent on any other country for any important element of its education. There is, however, in the case of India the strongest reason why the highest forms of education should be established in India and open to students, because India is the only country in the world where a large proportion of its inhabitants have strong social and religious objections to a sea voyage and to leaving their country. It is repugnant to the feelings of a large proportion of the people of Bengal at the present day, and those students who break through the customs of their country in this respect have often to undergo great social sacrifices. It is a matter that does not admit of argument, and even at the present time the offers of scholarships tenable in England by the Government are regarded by many as “bribes to apostasy.” The feeling may weaken and die away, but there is no doubt that for many years a large proportion of the ablest of our native students will conform to the practice of their forefathers in this respect, and will, if no change be made, be debarred from the advantages resulting from higher education and be excluded from appointments open to natives who are willing to study in England, as effectually as if they came under the clauses of a Disability Act. This is manifestly unfair, and is, we believe, opposed to the spirit of that principle of perfect toleration of all the religions of the country adopted by the Government of India as its leading principle in dealing with the peoples of India.

Hence while it is still to be hoped that natives of India will continue to go to England in increasing numbers, and whilst there can be no valid objection against the Government assisting deserving students who wish to study in Europe, provided it has first fulfilled its duty regarding higher education in India, common sense, good government, and justice equally demand that the rulers of India should recognise the imperative need for the establishment of institutions which will provide the highest training and education in the arts and sciences, so that the large class of deserving and intelligent students who desire higher education such as can be obtained without difficulty by students in Europe, and wish to qualify themselves for the higher professions

in India, but are prevented from proceeding to Europe by social reasons or religious scruples, may be placed on an equality with Indian students who go to Europe. An institution for higher education in Bengal is absolutely necessary in the case of scientific subjects, as there is no college, except the Presidency, where any satisfactory attempt is made to give the practical and theoretical training in chemistry, electricity, and heat, which is now recognised to be essential in Germany, France, Switzerland, and even in Scotland and England. The training is necessarily very imperfect—first, because the laboratory appliances and apparatus are much too small in amount and not up to date, and secondly, because the greater part of the time of the professors is occupied in teaching the more elementary F.A. and B.A. classes. It is said to be also necessary in Law and Medicine, but on this we are not qualified to speak. It is, also, quite as necessary for the introduction of the study of the higher mathematics in India. It is especially desirable in the case of the Oriental languages. Paris has its public school of Oriental languages, the chairs of which are occupied by distinguished Oriental scholars whose lectures attract students from all parts of Europe. Why should there not be chairs in Sanskrit, Persian, and Arabic in a teaching University in Calcutta, filled with able professors—Oriental scholars whose lectures might attract not only more matured and capable Indian students than F.A. or B.A. candidates, but even students from Europe desirous of studying Oriental languages at the fountain head, and whose researches and activity might develop a school of Indian oriental scholarship as renowned as that of the great orientlists of the Paris, Berlin, or other German Universities? This is just as essential to the welfare and dignity of India as advanced study in scientific subjects. Why, again, should advanced native students not have the opportunity of studying English literature from a higher standpoint than at present? It is hence not higher education in one branch of subjects or department of knowledge, but in all branches that is required in India; and the defect will not be removed by the establishment of a Technical Institute. This would, as pointed out previously, merely assist in completing the scheme of secondary education as there laid down, but would not fulfil the functions of a teaching University in the most advanced scientific education and training.

The chief feature in higher education is concentration of the intellect upon one or more branches of knowledge. It should evidently be something very different from the general culture which appears to be the aim of the present collegiate education up to the B.A. standard. The higher stage of education should teach the man to concentrate the intellect upon a subject so as not merely to obtain a thorough knowledge and complete grasp, but to think independently and correctly. His active life as a man will almost certainly present a succession of problems of more or less complexity requiring independent, sustained, and careful thought. For this the power of concentration is specially valuable. The higher education or training preliminary to this is hence characterised by specialisation of subject. This additional training does not, however, necessarily dwarf the mind or diminish its field of activity. It enables it to use its powers on any given subject of thought or enquiry to the greatest advantage.

Specialisation of study, however, carries with it a danger. The limitation of the field of study for the individual tends in some cases to narrowness of mental vision. The subject of such a study occasionally assumes an importance to the individual out of all proportion to its real value as an element of the sum total of human knowledge. The subdivision of scientific enquiry necessitated by modern advance tends to foster this defect, and it is especially desirable that the student, during the formation of his character, should not be allowed to contract this defect. The student should be constantly and visibly reminded that his special field of study is only a very small part of a great whole, every element of which is important, and all of which contributes to that sum total of human activity which constitutes intellectual progress. There are hence very strong objections against the student completing his higher education at this stage in a special institution of any kind isolated from other educational institutions, and the strongest reasons in favour of the establishment of teaching Universities, where students in different branches of learning may mix together and mutually influence each other, and be brought into contact with able men of different types.

One of the chief functions of a University is to provide facilities enabling young men "to follow that line of study systematically to which their aptitudes direct them under first-rate instruction. It is impossible to overrate the importance to a young man of being brought into contact with a first-rate teacher of his subject of study, and of getting from him a clear notion of what the systematic study of it means." Another function of nearly equal importance for the formation of character is to bring that larger and wider influence which a body of learned men distinguished for their power of imparting as well as of acquiring the highest forms of knowledge exercise on the general culture and the mental activity of students.

The only complete and satisfactory remedy for these defects in the present educational system would be the establishment of teaching universities at one or two of the largest and most influential towns in India. They should be initiated on a moderate scale, but on lines similar to those of the great German universities. They would be maintained in part by the fees and endowments, and the deficiency be met by a Government grant. They should be established in such a manner as to admit of extension with the growing wants of the community. An institution of this kind would necessarily be costly and require the aid of a large subsidy from Government, and it ought not to be made needlessly expensive at its initiation by establishment on a larger scale than is required for the present needs, but from the very first it should be carefully kept in mind that if it supplies a real want, slow and steady development will be a necessity of its existence.

The establishment of a Teaching University at Calcutta, whether it were independent or dependent on the present Calcutta University, would necessitate alteration to some extent of the functions of the governing bodies of the Calcutta University, and perhaps some modification of its Act of Incorporation.

The Government of India have undoubtedly done a great deal towards establishing education on a rational basis in India. The Natives of India have utilised the present system—chiefly, if not entirely—for the lower motive of gaining admission into the professions and Government service in India, and not for the highest purposes of education, viz., increased intellectual activity and progress. If a Teaching University is to be created on the widest basis, and become a permanent, living national institution, such as the Universities of Berlin, Paris, &c., are, the initiative should spring from the people themselves. A large proportion of the members of the higher Education Service feel the necessity of the extension proposed here, but it is doubtful whether any complete scheme elaborated by its members would not be viewed with suspicion, and be regarded rather as a professional cry than as an effort to indicate a want, and to suggest the means of rectifying it, which their knowledge and position enable them to gauge and qualify them to propose a remedy for. Hence the inception of a Teaching University for Calcutta in its *widest* and most complete form should not originate with the Government or the Education Department, but with the middle and upper classes of native society in Bengal. They should be prepared to contribute largely towards its endowment, and when a suitable scheme has been evolved by mature consideration, and endowments to a considerable extent promised, Government might legitimately be asked to assist largely in carrying out the scheme which would remove one of the most patent and grievous defects of the present system of education. It is therefore unnecessary at present to give the details of a scheme for the constitution of a Teaching University.

It, however, appears to us that the Presidency College might be re-organized and modified as to supply to a very considerable extent for years to come the higher education that appears to be imperatively required, and also the technical instruction which is required to complete the system of secondary technical education. When the upper and middle classes in Bengal recognize fully and intelligently their wants in these directions, and are prepared to do their utmost to remedy their defects, and to base their application for assistance to Government on the inadequacy of private effort to establish and support a large provincial institution, such as a Teaching University may be, the time for its establishment on a complete and efficient basis will have arrived.

We venture therefore at present merely to propose certain changes in the Presidency College, which will enable it at little or no additional cost to the

Education Department to give a higher education than at present, more specially in scientific subjects, and to show how these changes will also aid and supplement technical education. It appears probable that the Calcutta University would approve the changes, and give whatever assistance might be necessary to make them effective, so long as it was not required to make alterations in the regulations opposed to their general spirit and tenor.

The first and greatest drawback to higher education in India is the age of the students when they take their B.A. degree. Under present arrangements four years' attendance (at the least) at an affiliated college is necessary before the student can appear for the B.A. examination after passing the Entrance examination; and as schools and colleges think rather of percentages of success than of the most economical arrangements for individual students, the tendency has been to withhold students from examinations unless there was a reasonable or strong probability of success. The majority of students do not pass the Entrance until they are 16 years of age, and hence cannot possibly obtain the B.A. degree before they are 20, and the average age of the successful candidates at the B.A. examination is at least 21, if not 22. A very large proportion of the students are comparatively poor, and the social conditions are such as to make it necessary that they should, if possible, enter into life and obtain employment at an earlier age than the corresponding student class in European countries. Hence the very great majority of students cannot afford time to pass beyond the B.A. level. It is not so much the cost of education as the long period over which it is spread that prevents the extension of the higher forms of education. The periods of two years from Entrance to F.A. and from F.A. to B.A. are undoubtedly necessary for the ordinary or mediocre student. A small proportion—that portion who are fitted by abilities and mental powers to benefit and take advantage of the higher education contemplated in this scheme—could master the F.A. subjects in one year after passing the Entrance examination, and the B.A. subjects also in one year after passing the F.A. These students, the clever men, are under present arrangements unnecessarily kept back two years. They lose the stimulus of activity and rapid progress at the most critical period of their student life, and this solely that the less advanced and intelligent men may have ample time to prepare for the examinations. If the colleges were chiefly maintained with the object of forming character, &c., there might be some excuse for this; but as they are solely institutions for preparing students for the University examinations, and both the public and Government judge of their efficiency by the one test of success in these examinations, there is absolutely no reason for this arrangement by which the strong are sacrificed to the weak, unless it be to suppress intellect. The first necessity for higher education is to obtain the most intelligent and quickest of the native students at an earlier age than is possible under present arrangements. This could be easily effected if the Calcutta University would permit students to appear at the end of one year after passing the Entrance examination at the F.A. examination, and if they passed in either the first or second division, to permit such successful students to appear at the B.A. examination at the end of a further year, with the condition that they should take up an honour course; and if they passed the B.A. examination and obtained at least 50 per cent. of full marks in an honour subject, they should be permitted to appear at the M.A. examination twelve months afterwards in that subject, or in one of the subjects in which they passed in honours at the B.A.

It would thus be possible for a clever and hard-working student to pass the B.A. examination two years after Entrance instead of four as at present, and he would probably be a better student than at present, for his education would under such an arrangement be far more adapted to his abilities and powers, and be calculated to strengthen them by evoking their full employment.

These changes would probably require that the course for the M.A. subjects should be curtailed to some extent and also re-arranged.

For example, the mathematical and scientific subjects might be arranged as follows :—

- (1) Pure mathematics.
- (2) Applied mathematics.
- (3) Electricity and magnetism and heat.
- (4) Light and sound.
- (5) Chemistry.

This is advisable for other reasons, as the present courses are long enough for two years if they are to be thoroughly studied; and under the new arrange-

ments these courses instead of being final courses would lead up to, and be preliminary to, the higher course of lectures proposed below.

By this concession, and without any material alteration in the Calcutta University arrangements, clever students could take their B.A. degree in two years after Entrance and the M.A. degree three years after Entrance. They would not only have a fair general culture, but have also specialised to some extent for the B.A. and still more for the M.A. examination, and would be at a fit stage to take up higher education similar to that of the great German universities. The first change, then, that we would propose in the Presidency College would be that it should arrange its F.A., B.A., and M.A. classes for clever students only. Each course should be finished in one year, and should be taught in such a way as to leave far more to the student than is at present possible. The course should be gone through once carefully by means of lectures, and there should be no revision, such as now takes up so much time, and is as wearisome to the Professor as to the students. This would diminish the work of tuition by one-half in the F.A. and B.A. classes, as there would be only two and not four sets of classes as at present.

The above arrangements would supply a small body of intelligent and quick students, who could without any increase of their period of studentship devote two years to higher education. The higher education of these students could then be undertaken on similar methods to those employed in the German universities. Courses of lectures might be given by able Professors in various subjects, and be based upon a course of systematic reading in the subjects of the lectures as laid down by the Professors.

In the scientific subjects a large portion of the time of the student would be devoted to a thorough practical training and complete course of instruction in the chemical or physical laboratories, and full opportunities given to the students to take up original investigations with the assistance and guidance of the Professor.

There should be courses of lectures on the following subjects:—

- (1) English literature.
- (2) Sanskrit.
- (3) Arabic.
- (4) Persian.
- (5) History and Political Economy.
- (6) Philosophy.
- (7) Pure Mathematics.
- (8) Applied Mathematics.
- (9) Chemistry.
- (10) The Physical Sciences, including Light, Heat, and Electricity.
- (11) The Natural Sciences, including Botany and Geology.
- (12) Biology.

The methods of teaching in the lower stages (*i.e.*, the F.A. and B.A. stages) would probably not differ much from those at present in use, but in the higher, more especially in the upper stages, it would be entirely different. The Professors would give more or less complete courses of lectures during the year on definite subjects, and would suggest courses of reading in connection with the subjects. There would be no thought of preparing for an examination to modify the Professors' courses, or to distract the attention of the student.

The courses and lectures would be so arranged that the student could attend several if he wished it, and they might be made subservient to each other. Thus the student in the physical sciences could attend the mathematical lectures in pure mathematics, and acquire, if he did not already possess it, that larger and more advanced knowledge of mathematics necessary for the higher investigations in physical sciences. Hence two classes of Professors would be required for the teaching of the Arts and Science courses in the Presidency College if it were modified in this way—

A. Professors for the F.A. and B.A. classes. Probably the following would be sufficient:—

- 3 Professors in English, History and Psychology.
- 1 Professor in Sanskrit.
- 1 Ditto in Arabic and Persian.
- 1 Ditto in Mathematics.
- 1 Ditto in Chemistry.
- 1 Ditto in Physical Science.

Their work would be less exacting and more satisfactory than at present, as they would deal with a higher class of students. They would give a definite and complete course of lectures in one year, and there would be little or none of the wearisome revision which is at present necessary for the ordinary student.

There are usually 14 Professors attached to the Presidency College, and as only 8 would be required to lecture on the one-year F.A. and B.A. courses, there would be 6 Professors available for the higher teaching.

The superior education from the M.A. classes upwards should be entrusted to a separate body of professors, men who, in addition to having that general culture which the teaching body of an University ought to possess, should also have that exact and intimate knowledge of the subjects on which they are appointed to lecture which is marked by a complete acquaintance with its details as well as with its principles, and also with its most recent developments, and possess the ability to guide others to acquire the special mental habits and training necessary for original investigation in their department of knowledge. They would, in fact, be specialists in the higher sense of the word as well as teachers.

The following probably would be the Professors required at first :—

Professor of English.

Ditto of Sanskrit.

Ditto of Arabic and Persian.

Ditto of Psychology.

Ditto of Mathematics (including pure and applied mathematics and Astronomy).

Ditto of Chemistry.

Ditto of Physical Science (or of Electricity, Heat, and Light).

Ditto of Natural Science (or of Botany and Geology).

Ditto of Biology.

To make the change, at first only three additional Professors at the utmost would be required, and these could be obtained without any increase of expenditure if the Government pursues its policy of handing over the smaller mofussil colleges to native managing bodies.

It has already been decided to abolish two of the Government colleges—Berhampore and Midnapore—as Government institutions, and to hand them over to local bodies. Hooghly and Krishnaghur are again so near to Calcutta that, owing to railways, &c., there appears to be no special necessity for keeping up these colleges. Also the Chittagong College occupies no well-defined place in the Government system of education, and students from the Chittagong district might go to the Dacca College, and thus that College might be abolished as a Government institution. In this way the five colleges—Berhampore, Midnapore, Hooghly, Krishnaghur and Chittagong—could be abolished as Government colleges. On the other hand, the following four mofussil colleges represent well-defined districts, and appear to play an important part in the Government system of education :—

(1) The Dacca College for the whole of East Bengal.

(2) The Patna College for Behar and Chota Nagpore.

(3) The Rajshahye College for North Bengal.

(4) The Ravenshaw College at Cuttack for Orissa.

It might be arranged that these colleges should only teach up to the B.A. standard, and that all higher teaching than this under the auspices of the Government of Bengal should be given at the Presidency College. There appears to have been a general consensus of opinion among both European and native witnesses examined at the Public Service Commission, that the Principals of colleges should be European, but that native graduates are competent to teach up to the B.A. standard. We would therefore propose that the Professors of English at the above four colleges should be European graduates, and that they should also be Principals of these colleges; but that the remainder of the teaching staff should consist of native graduates. In this way by the reduction of the standard of teaching to the B.A., and by the employment of cheaper teaching agency, the cost of these mofussil colleges could be largely reduced. In Calcutta, besides the Presidency College, there are two other Government colleges teaching Arts courses, viz., the Sanskrit College, which teaches up to

the M.A. standard, and the Madrassa, which only teaches up to the F.A. standard. The Sanskrit College might only teach up to the B.A. degree, and the Principal and perhaps one or more of the Professors of this college being relieved of the M.A. work, could be utilized in teaching their particular subjects in the Presidency College. In the same way it would appear probable that the Principal of the Madrassa College, who would generally be a distinguished oriental scholar, could form one of the body of lecturers at the Presidency College as well.

It has previously been shewn that in order to teach the ordinary F.A. and B.A. courses, and to provide for the M.A. and higher teaching, for the present about 17 Professors would be required. As pointed out, the Presidency College now has 14 Professors, and it is suggested that the Principals of the Sanskrit and Madrassa Colleges (and perhaps one or more of the Professors at the Sanskrit College) should be included in the list of Presidency College Professors, and thus only one extra Professor would have to be provided. It is not of course intended to be stated here or elsewhere that the actual present staff of the Presidency College could be maintained, for considerable changes would have to be made; but clearly the pay of 16 Professors is available, and only 17 Professors are required under the scheme.

It will thus be seen that without any practical increase of expenditure to Government or extension of the period of student life, clever and intelligent native students might have a higher training for two years, nearly equal to that of the European Universities. The fees might be raised slightly, and more liberal scholarships awarded to assist poorer students. It would, however, be useless to make these changes unless the Calcutta University made some such concession as the following.

Such a training, however valuable in itself, would not be attractive, unless it led up to a corresponding University degree. The only degrees possible above that of M.A. are those of Doctors in Arts and Sciences. Hence we would propose that these degrees should be conferred by the University of Calcutta on those students who have already the M.A. degree and attended lectures at the Presidency College for two years after taking that degree, and written a thesis, or performed an original investigation, which shall be approved by a body of persons qualified to decide on its merits. The only body fully qualified would be the upper Professors of the Presidency College.

The Calcutta University would hence make the scheme effective, workable, and satisfactory if it would consent to establish Doctor's degrees, and appoint the higher body of Professors of the Presidency College as the permanent examining body for these degrees under suitable conditions. If this were done, the degrees of Doctors in Arts, Doctors in Sciences would be conferred by the University on those students who had taken their M.A. degree, and attended lectures, &c., for two years afterwards at the Presidency College, and then submitted an essay or thesis on some subject chosen either by a Professor or the Professors of a group of subjects or by the student himself, and be approved by the body or group of Professors who were directly or indirectly concerned with the subject of the essay. The University by consenting to this arrangement would secure an important and useful ally in conducting its examinations more satisfactorily than at present. One of the great defects in the present examinations is the difficulty of obtaining a body of efficient and permanent moderators who can detect errors, and suggest alterations in the examination papers, and satisfy the Syndicate and University that the questions and papers are in accordance with the limits of subjects, and the instructions issued to examiners; and last, but not least in importance, maintain an approximately uniform standard in the examinations questions and the marking of the papers from year to year. The upper body of Professors of the Presidency College would be eminently qualified for this duty. They would be perfectly unbiassed and unprejudiced, as they would in no way be interested in the results of the examination, and they would as a body have that complete knowledge of all the subjects of examination which would enable them to revise the papers thoroughly and efficiently and with equal judgment all round. Also when the papers were returned printed from Europe, arrangements could very easily be made for them to go through a printed copy of each, and detect all misprints and errors that had been overlooked in England during the printing. In the event of such being found, they could

cause instructions to be communicated with the papers to the Superintendents of the various examination centres to acquaint students with the mistakes when the papers were given out. In this manner serious difficulties arising from the oversight or carelessness of examiners, and errors in the printing of the papers would be avoided, and all source of complaint on that head be removed.

The preceding remarks will be sufficient to indicate the chief changes in the constitution of the Presidency College which we venture to propose, and it only remains to make some remarks respecting the status of the higher Professors. In the first place, each Professor would be a specialist, who could very inadequately be replaced by a substitute from the lower body of Professors teaching the F.A. and B.A. classes. It would hence be necessary, unless he were actually incapacitated by sickness, for him to give his annual course of lectures, as in any European University, and hence long furlough would be inadmissible. On the other hand, it would be advisable that the Professors of the scientific subjects should go frequently to Europe and learn the newest methods and procure the latest apparatus. We would propose that lectures should be given during eight months (July to March), and that Professors should be permitted to spend the four months' vacation (March to July) in Europe, if they desired it. It might deserve the consideration of Government whether Professors should be encouraged to go home by grants of half the passage-money if they went for some definite object connected with their course or subject of lectures.

If the proposed changes were adopted by Government, it is probable that the great majority, if not all, of the Professors might be obtained from the present teaching staff in the various Government colleges; but in the course of time it would probably be found necessary to obtain specialists from England to fill up vacancies on retirement, and suitable Professors could not be obtained on the terms now offered for recruiting in the Education Department. Hence it would be advisable to begin to improve the status of the Educational Department, more especially the pension rules. An improvement in this direction, and direct appointment to the third grade instead of the fourth grade, would, perhaps, be sufficient to secure the class of men required for this work.

This completes the rough sketch of the plan by which the Presidency College might be reorganized so as to fill what we believe to be its true place in the educational system of Bengal, and enable it to give not only the collegiate education required up to the M.A. standard of the University but also the higher and superior teaching suggested in this note. It still, however, remains to be considered how these proposals affect the plan of affiliating a Central Technical Institution to the Presidency College to which reference has been previously made. As has been already stated, the proposal for the creation of a technical institution is given as an appendix to this memorandum, and it will not, therefore, be necessary to enter fully into the discussion of the whole subject of technical education.

In the paper referred to it is shewn that technical education is only an extension and a necessary part of secondary education, and that the courses of study required under all systems are up to a certain point identical. The foundation of all technical knowledge is pure and applied science, and one of the main objects of the proposals previously made has been to increase the facilities for the study of the sciences, and to ensure more perfect and practical methods of teaching them. To a great extent, therefore, the earlier training of all technical science could be equally well performed at the Presidency College at the same time as the F.A., B.A. and perhaps M.A. courses are being taught, and it is only in the final stages of technical training that the paths would diverge.

A reference to the appended note will shew that in the scheme for technical instruction the following subjects, amongst others, run through the course:—

- (A) Mathematics,
- (B) Chemistry,
- (C) Physics,
- (D) Geology, Mining, Metallurgy, &c.,
- (E) Botany,

for all of which subjects practically full provision for teaching is made under the scheme for developing the higher training. Additional lectures would of

course be required in other subjects, such as Drawing (provided for by the School of Art), Physical Geography, &c.; but it will be seen that a very slight extension of the staff proposed under the previous part of the scheme will enable all the ground-work for technical instruction to be laid by the Professors of the Presidency College. Only a few additional lectures in special subjects would from time to time require to be added to the courses before laid down. If, therefore, the scheme for the higher instruction put forward be carried out, it will be possible at the same time to push forward the scheme for a Central Technical College to a great extent; and if such be done, the system of education in Bengal would be rendered fairly complete, and capable of continuous development on the lines of present methods of education. It would then stand thus:—

- (1) Primary education as at present carried on.
- (2) Secondary education B.A. degree in Arts and Science as carried on in the Presidency and four Government mofussil Colleges, the Sanskrit and Madrassa Colleges and the various private Colleges. Technical instruction and instruction up to the M.A. degree as proposed to be carried on at the Presidency College.
- (3) Higher instruction as proposed to be carried on by systematic courses of lectures in Arts and Science and efficient laboratory training at the Presidency College.

In addition to which there would still be carried on the special instruction in Engineering at the Sibpore College, in Medicine at the Medical College, and in Law by the Tagore Law Professor and lectures in several colleges.

This would represent a fairly complete scheme of education, and on such a basis work could probably be carried on for many years to come.

It now remains to consider roughly the financial effect of the proposed changes. If the above suggestions for closing certain provincial colleges, retaining the six mentioned above with the Presidency College, were adopted, and if the teaching at the six colleges were limited to the B.A. standard, and the staff in each consisted of an European Principal and Native Professors, there would be a very considerable saving in the annual expenditure for the Government colleges teaching up to the B.A. standard. In the first place, the expenditure on Hooghly, Krishnaghur, Berhampore, Midnapore and Chittagong, which in 1884 was Rs. 70,000, would be saved entirely, or in part, if grants-in-aid were given to these colleges for some years. There would also, we estimate, be a saving of from 30 to 40 per cent. in the cost of the Dacca, Rajshahye, Patna and Cuttack Colleges. By the proposed alterations in the staff of the Dacca, Rajshahye, Patna, and Ravenshaw Colleges, the services of several graded officers would be available for increase of the staff of the Presidency College, if necessary. Thus at least two graded Professors would be set free at Dacca, and three or four at Patna. There might hence be a slight reduction in the number of the graded officers as retirements took place, and the saving thus effected would more than pay for the native staff at these colleges. The savings effected by this change it is difficult to estimate, but if carried out in this way, they would probably amount to Rs. 15,000.

The present staff of the Education Department is in fact more than sufficient to enable the whole of the work as suggested to be carried out. The graded department at present consists of—

- 1 Director of Public Instruction.
- 2 First grade officers.
- 7 Second grade officers.
- 11 Third grade officers.
- 20 Fourth grade officers.

There would be required under the proposed alterations—

- 1 Director of Public Instruction,
- 6 Inspectors (5 circle and 1 of European schools),
- 4 Principals of Colleges,
- 4 Principal and Professors at the Engineering College,
- 8 Professors for the F.A. and B.A. classes of the Presidency College,

making in all 23; and allowing for absentees on furlough, 28 officers would be necessary to carry on this part of the work of the Department, leaving 13 for

the higher work. As only 9 or 10 are required for the system at its commencement as above suggested, three or four of the graded appointments could be held in abeyance, and the saving thus effected might be utilized to purchase the apparatus required for the chemical and physical laboratories, and the appointments be utilized hereafter for establishing additional Professorships at the Presidency College.

It will thus be seen that the amount saved by the closing of five colleges, by the alteration of the staff of some of the colleges, would effect a saving of probably Rs. 80,000—far more than is necessary to pay for demonstrators and apparatus for the laboratory. It would also provide an ample staff of Professors to carry out the higher education as proposed at the Presidency College. The scheme has also the merit of enabling clever students to advance to a much higher level of education in the same time as is at present required to enable them to take the M.A. degree, and in addition the changes by which the higher education would be effected would tend to improve generally the character of education, assist in the establishment of technical education, and provide the highest form of technical instruction. And the whole of these improvements can, it is shown, be effected without any additional cost to the State.

JOHN ELIOT, M.A.,

Professor, Presidency College.

ALEX. PEDLER, F.I.C.,

Profesor, Presidency College.





सत्यमेव जयते

APPENDIX A.

THE rapid advance of Germany and the United States during the past ten years is a very strong proof of the advantages of the extension of education based on the general system suited to the instincts of the people in stimulating both material and intellectual progress. The necessity for development in England in the same direction is becoming more and more recognized. The desire for a wider and more practical education in England is at present chiefly shewn by a demand for technical education. That this change is necessary is certain. Whether it will do all that is expected from it is doubtful.

If India is to advance steadily in the direction laid down by the Government of England as the goal of its efforts, it is certain that the establishment and development of a general educational system would be one of the most effective aids. Unfortunately the determination of a satisfactory and properly balanced system of education requires judgment and common sense, and a clear perception of what education can, and also what it cannot do. English party Government is by no means favourable to the evolution of an efficient system of general education. Sentiment is allowed to override common sense. Fads are more potent than facts. The interests of religious sects or political parties are too often the weightiest factors, and these defects are too often supplemented by the changes and fluctuations of policy due to the necessities of party in a matter which affects the progress of the people as a whole.

It is the greatest mistake for the Government to educate numbers for a position in life above that which they occupy, unless there is the strongest probability that they will hereafter rise to a position corresponding to their education. It is as important that the State should not neglect or ignore the education of any class or give them an education which unfits them for their probable position in life. The lower classes are as important to the State by reason of their numbers as the middle and upper classes by reason of their wealth, influence, and position.

It is far more desirable that the citizens of a State should learn to act for themselves with prudence and foresight, to recognize and perform their duties in the various relations of life, and to be as careful of the rights and claims of others as of their own (the surest way to obtain their own permanently), than that they should learn to read a newspaper and do an intricate sum in arithmetic, which is apparently the *summum bonum* of education in England as directed and aided by Government. Whatever educational system is adopted in any country should be such as will in no way conflict with the acquisition and practice of the more essential virtues and qualifications of good citizens.

The primary duty of the State in regard to education is inspection (and in certain or in all cases), examination and the award of diplomas and certificates, either directly by its officers, or indirectly by the appointment of properly qualified bodies or corporations for the purpose.

It is essential to the intellectual culture of the State that it should deal summarily and effectively with inefficient and bad schools as it should do with adulterated articles of food which affect the physical well-being of the people. With the extension of education, inspection will become in India a more complex as well as a very much larger duty.

The State should also assist in establishing and carrying out any essential parts of the complete system which the individuals or classes concerned are unable to initiate or maintain in an efficient state from want of means or combining power. Thus it will probably be necessary in India for the Government to assist permanently—

- (1) In the education of the very lowest classes (by grants in aid, &c.).
- (2) In the highest forms of literary, scientific, and technical education. The numbers affected are always small. The cost of such forms of education is necessarily large, and those best able by their abilities to profit by these special forms of education are frequently least able to pay for it.

With the exception of these two classes, the assistance of Government (by grants-in aid, &c.) should be given only in the initial or early stages. It may be necessary in a country like India for the State to assist largely in establishing a satisfactory system of education for the middle and upper lower classes, but the assistance should not be permanent. If the system is sound and practical, the time will come when its advantages will be fully appreciated, and the increase of the numbers of students will be met by the establishment of educational institutions independent of Government. As soon as there is evidence that the demand for middle class education can be provided for independently of Government assistance and grants, Government should gradually withdraw its aid from that of colleges or schools providing for these classes. Such a stage has been reached in Calcutta and several of the large towns in Bengal. The City College and City School, the Metropolitan Institution, and the missionary colleges are either entirely self-supporting or could be so by a very slight increase in the fees charged, and hence what are called the Government colleges should be during the next few years either closed or transferred to local bodies. Hence it appears from these and similar considerations that the educational changes and extensions necessary for right progress in India are the following:—

- 1st.—A gradual but a very large extension of primary education. It will be necessary, if this be carried out, for the Government to assist in grants to an extent which will show a steady increase for many years, and finally become a large permanent charge on the revenues.
- 2nd.—The gradual withdrawal of the State from the control and maintenance (partial or entire) of ordinary colleges (teaching up to the B.A. pass course), high schools and secondary schools.

3rd.—The establishment, control, and partial or entire support of colleges or universities for the highest forms of education in Arts and sciences and of technical training (that is, of medical schools, engineering schools, technical colleges, and what I am obliged to call universities from want of any other suitable and more definite name). Each institution of this kind will require a body of Professors who will give courses of lectures on some special subject or branch of subjects to the highest class of students in the country, and also be prepared to indicate to students how to prepare themselves to become independent thinkers and workers in that subject.

4th.—The establishment of a permanent general system of inspection (and of examination, &c.) capable of development co-ordinate with the advance of education. The entire inspection of the primary and secondary schools, and the partial inspection of high schools ought to be entrusted to educated natives. They should be grouped under Superintendents of Inspectors. The inspection of European schools and of colleges, and the occasional inspection of high schools, would have to be entrusted for many years entirely to European Inspectors. There would be no difficulty in enforcing inspection in India, as it would merely be necessary for Government to publish an order that the students of no college or high schools, &c., would be allowed to send candidates for the University or other similar examinations unless the institution was open for Government inspection.

The English members of the Educational Department as thus modified would be—

1st.—The Director of Public Instruction.

2nd.—Inspector of colleges and high schools and Inspector of European schools.

3rd.—Superintendents of Inspectors of primary, secondary and intermediate schools.

4th.—Principals and lecturers in the universities and technical colleges.

Under such a system many of the lecturerships in the universities and technical colleges would be held by Europeans, and it would be necessary to import suitable men—men of culture and abilities. Their earliest work in India as lecturers or professors would tend to make them specialists in the better sense of the word. They should be not merely men of good general abilities and culture, but also possess that power of concentrating their intellect upon a subject or a branch of subjects which is necessary for thorough acquaintance with, and original research in, that subject. The Government of India appears to conceive that the best men for technical colleges are specialists in the narrow meaning of the word—men of narrow intellect and range of mental power, able by training to do one thing well, and therefore certain to fail more or less completely if they are assigned any other work. These are certainly not the men wanted for technical colleges or teaching universities. If either are to be established and become successful, their Principals or Heads of Departments or Faculties should have the power of explaining the most abstruse mental conceptions in their special subjects clearly, and of awakening the interest and enthusiasm of students in these subjects, and in fact have the qualities of educators in the highest sense of the word. At the same time they should have the powers necessary to enable them to initiate a large change and make it successful—in fact those of administrators to a considerable degree. If successful, they would by their thorough acquaintance with the aims, the subjects, and methods of education in India, and by their special training and proved gifts, be the very men who would make the best Inspectors of colleges and Superintendents of Inspectors (and moderators in University examinations which are much wanted in India), and finally Directors of Public Instruction. The order of promotion in the department thus constituted would then be—

- (1) Lecturer, and then perhaps Principal of a University or technical college.
- (2) Inspector.
- (3) Director.

In my opinion the suggestion of the Government of India to import men for the technical colleges for a limited period is about the worst they could adopt. Government requires really good men for initiating the work, and the standard of the men imported should improve rather than deteriorate. For one feature of the development of the system would be the gradual increase in the mental capacity of the students as well as in their numbers. Such men are largely in demand in England and the colonies at present. If they come out to India for a period of years, they would, if they devoted themselves to work in India, break off connection with England, and would find it much more difficult to find employment in England on their return. They would during their service have their minds naturally more or less directed to the end of their service and return to England, and they would probably think more of that than of the success of their work in India. The Government would have to pay very highly for their services, if they wished to secure really good men, and probably find in the end that the results did not by any means correspond with their anticipations. The proposal is hence, in my opinion, a most extravagant and ineffective one. The Government would pay excessively in order to secure good men, and dismiss in a few years' time from its service the very men best qualified for further service in the department.

I am certain that if the Government chose to offer reasonable (not extravagant) pay and pension, and also fair prospect of promotion, they can obtain, permanently, the services of the class of men from England required for the proposed universities and technical colleges.

APPENDIX B.

Memorandum on technical education for Bengal.

IN connection with technical education, the first difficulty which arises is to define the exact scope and limit of the term, for the purpose of any practical discussion of the subject. Taken in the most general sense, these words would include all manner of instruction required by the workman in his calling, by the manufacturer in his business, and by all professional men in their various professions. In its widest sense, then, technical education is practically synonymous with the entire education of a country, so far as that education fits, with the best possible results, the people for the purpose of carrying on the work that may fall to their lot, while it would exclude all education the aim of which was not directly concerned with such work, but which may be summed up under the term "culture."

In ordinary discussion, however, the term has come to have a specialized meaning, and to include only the special training, both practical and theoretical, which requires to be added on to ordinary school or college training in order to fit certain classes for the particular trade, industry or profession by which they are to gain their living. A limitation must also be put on the meaning of the term technical instruction, inasmuch as it cannot be considered to include the acquirement of sufficient technical skill in any trade, industry or profession, which can only be gained in the arts and manufactures by the prolonged manual or other training which is obtained in the workshop, or in the case of professions, which can only be gained by the constant practice of such profession. Technical instruction therefore, in its restricted sense, should be taken to mean that portion of education which, following on the general education, should fit the recipient to commence and proceed with the actual practice of his work, trade or profession, with the greatest possible advantage to himself and to the community; for no system of technical instruction, however elaborate, could be devised, which would turn out experienced workmen or manufacturers, or persons practically acquainted with the trades or professions they will subsequently have to carry on. Technical education may therefore be briefly defined to be general and practical instruction in those sciences and arts the principles of which are applicable to various employments in life.

The three phases in a perfect scheme of training will be—*first*, general education; *second*, technical education or instruction; and *third*, the application of the principles learned in the first two phases to the practical affairs of life.

It is well known that for the protection of human interests this form of training has been insisted on in certain professions, and with excellent results. A single instance need only be quoted, as in the training given for the medical profession, where the general education is succeeded by the technical instruction, which is both practical and theoretical, and finally the actual work of medical practice is carried on, which completes the perfect scheme of training.

For the majority of trades and professions, etc., no such scheme as this exists, and particularly in India at the present time there are absolutely no facilities by which a knowledge of the principles underlying various trades and professions can be obtained to fit persons for engaging in the actual battle of life.

If India then is to have a successful industrial future, provision must be made for technical instruction of all kinds, and considering how backward the main industries of India are, it will be necessary to make strenuous efforts to even keep pace with the efforts which are being made in Europe. The Government of Bengal having, however, called for a scheme for introducing technical instruction, it is unnecessary to bring forward arguments as to the urgent and paramount necessity of such education in India. In order, however, to obtain an idea of the attention which this subject has attracted in Europe of late years, and also to see the value which those countries put upon technical education, which have fostered it for the longest period, and which have therefore come practically to estimate and test its value, it will be desirable to add a few details as to the cost of what is being done in technical education in Europe. The following paragraph is taken from "Nature," volume 30, page 357, and the facts and figures there quoted are obtained from the report of the Royal Commissioners on technical instruction in England, published in 1884:—

"It is, however, with the higher technical instruction, with the great Polytechnic colleges of Germany, and with the *École Centrale* and *École Polytechnique* of Paris that the interest of the Commissioner's report culminates. The German Polytechnics form a group of institutions of which the type is absolutely wanting in this country. These institutions, though in many respects resembling the German Universities, differ absolutely from them, not merely in being technical and practical, but in having fixed curricula of study, and regular systems of examination. The eleven schools of this type (eight of which are in Germany proper, one at Zurich, one at Delft, and one at Moscow) have been built at a cost of not less than three millions sterling, and are maintained at an annual cost of over £200,000. This amounts to a State expenditure of about £100 per annum for each student in attendance. This may be contrasted with the case of the two leading English Universities of Cambridge and Oxford. These and their colleges are believed to have a total annual income from endowments of £500,000, and as there are about 5,000 men in total attending the two Universities, this also is at the rate of £100 per annum per student. There is, however, room in the Polytechnic for three times the number of students actually in attendance. A few figures respecting some of these schools will show how these institutions stand in public opinion. The Munich Technical High School cost £157,000, the apparatus

alone being worth £36,000, and the annual expenses amounting to £20,000. The Zurich Polytechnic spends £20,000 annually, £13,800 being derived from Federal taxes, and £3,794 only from fees. There are forty-five professors on the lecturing staff. £50,000 have just been spent on laboratory extension. The Stuttgart Polytechnic has a State subvention of £12,000, that of Dresden £12,200. The Hanover Polytechnic cost £350,000; its collection of models (chiefly engineering) £36,000, and £1,250 is spent every year in adding to the collection. Some idea of the preparation made for teaching engineering students may be gathered from the fact that there are stated to be in this one school no fewer than 673 tables for drawing. The Berlin Polytechnic, now nearly completed, has cost £450,000, that of Moscow £496,000. The chemical laboratory of the Polytechnic of Aachen alone cost £45,000. The Bernoullianum of Berne cost that little town more than £1 per inhabitant. At such a price do our neighbours provide for the higher technical training. In France, too, the technical schools are maintained at great cost. In the École Polytechnique, salaries alone amount to £22,000 per annum. A new addition to the laboratories is costing £96,000. All this is found by Government. On the other hand, the École Centrale, which spends £17,836 per annum, is self-supporting, the fees being very high."

As has been previously briefly indicated, the subject of technical instruction should not be considered as something separate and apart from, if not even antagonistic to, ordinary general education, but it is in reality strictly and logically only a development of ordinary general education, and the scheme of general education, if properly arranged, should be constructed to lead up gradually to the scheme of technical education, and there should be no break in continuity at all. Up to the present time in India, the schemes of education have been so arranged as to lead to University examinations and University degrees only, where literary subjects are of course of greatest importance, but it is well to consider that the most valuable education to the majority of persons will be that which leads most directly to understanding, mastering and improving in the work, which they will have to carry on in their future life.

Every action in life, every trade, every industry, every profession can only be carried on strictly in accordance with the uniformities of nature, or as they are called the "Laws of nature," the study of which constitutes "science," and technology in particular is merely the study of the practical applications of science. A system of education which has for its aim the development of literary subjects only, can therefore never be a satisfactory introduction to technical instruction, the foundation stone of every branch of which is pure science, and therefore the principles of science ought to underlie all education. There is of course a necessary preparation in general education, which will always commence with the so-called "three R's," and proceed with the study of the elements of language and mathematics, etc., before science can be taught with effect, but the study of elementary science should be commenced at the earliest possible age, and should be continued through every subsequent stage of education. Just in the same way as the study of science in early education is an essential element before the commencement of technical education in those branches of work which are founded on scientific principles, so also, as being the foundation of all branches of art training, the study of drawing should be introduced at the earliest possible stage in education. Rudimentary drawing in fact should be placed on almost the same footing as writing, and studied from the commencement of education, and should be continued throughout it. Both elementary science and drawing should not be considered as optional or additional subjects, but rather as fundamental and compulsory subjects in all the lower schemes of education, and these points cannot be too strongly insisted on.

An education founded on such principles would then form the most appropriate introduction for all forms of technical education which could be devised, and it would be easily possible to modify the existing schemes of lower general education in Bengal, so as to include these subjects. Following on such a preliminary general education in which elementary science and drawing form prominent subjects, the first portion of technical instruction would consist in the further development of science or the general principles on which all trades, professions, and industries depend, and the study of such sciences must be carried on, as far as possible, practically as well as theoretically. A foundation of pure and practical science having thus been laid, the second portion of technical training would follow, which would consist in the application of the scientific principles previously learned to the special industry, trade, or profession, which is subsequently to be followed. The object of such training is of course simple; in broad terms, it is to teach general principles first, and afterwards to teach the application of such general principles to every-day industry, and by this means to produce an intelligent appreciation of the work which has to be done. A person trained by such a system becomes an intelligent workman, foreman or master, while a person who has simply learned the applications of science in a trade, industry or profession, without the first principles on which they are founded, and who will work merely by "rule of thumb," is no better than a machine, and in fact in some respects worse than a machine; for while a machine can always be trusted to do its allotted work, the unintelligent workman cannot be so depended on.

The principles thus laid down then underlie all systems of technical education, and it remains to be seen how such principles can be best applied to existing circumstances in India.

If, then, the greater part of technical education is or should be merely an extension of ordinary education in particular directions, the question naturally first arises whether technical instruction should necessarily be given in separate or special

schools, or whether the institutions devoted to the general purposes of education could not be utilized to a large extent for imparting the earlier portions of technical training. There would certainly seem to be no reason why the institutions which are already giving education in India with a view to entering into a college, or with the final aim of the student attaining a University degree, should not by a very slight modification of their system of teaching be made to embrace the required teaching of elementary science, of drawing, design, etc., which are the elements on which all technical instruction is based; and further, there would appear to be no reason why the further study of pure science, both practically and theoretically, which is the first step to the higher technical instruction, should not be carried on in such existing institutions as the Government colleges, etc., by perhaps a slight enlarging of the sphere of work, and a slight strengthening of the staff. Up then to the final stage where the technical student requires to be taught the practical application of science, or of general principles to the actual work or industry which he will afterwards have to practise, there is no reason at all why the present educational institutions, slightly modified and extended, should not carry on the work required. But in order to carry out the final part of the training, no facilities to any extent at present exist in India, and thus the final and most important part of the training will have, if the work is to be thoroughly well done, to be separately provided for by the creation of new institutions. It is true that this part of the training could also be given by a very considerable expansion of educational institutions at present existing, and this would probably be the most effective way of proceeding and of utilizing the existing organization for education, and if such a simile can be used, the manner of expansion will be similar to that which took place in education in Bengal, as regulated by the University examinations, some fifteen years ago, when on to the purely literary education which had previously obtained, the study of science was affiliated, though in a theoretical and unsatisfactory manner, and now what is required is to give greater facilities and opportunities for the practical study of science, and to affiliate on to it the study of the practical application of science or of general principles, and thus to provide instruction in technology.

It is next desirable to examine the general classes of persons by whom such technical instruction will be required, and practically these are reducible to three—*First*, those who are the actual workers in any trade, industry, etc., and who would be represented in most cases by actual workmen and perhaps the lower classes of foremen; *second*, those who have the supervision of work or workmen, and who will generally come under the head of foremen, managers and masters; and lastly, provision must be made for teaching a third class, who shall act as teachers in spreading technical instruction. It is evident that the same course of instruction cannot be utilized for the three classes, though it appears probable that two forms of instruction would be sufficient for the three classes, a lower form of technical instruction being provided for workmen, and the lower grades of foremen and persons of this class; while for the higher grades of foremen, managers, masters and teachers a second or higher form of technical instruction would have to be arranged, the masters and teachers proceeding further in this branch than the foremen and managers.

In India also a sharper line of demarcation will inevitably have to be made between the two classes of teaching than is the case in European countries, from the fact that the main body of workmen and the lower grades of foremen will be natives of this country, though there will be a considerable number of poor Anglo-Indians belonging to this class also, and the main part of the instruction to this class will necessarily have to be given through the Indian vernaculars. On the other hand, the instruction of foremen, managers, masters and teachers would have to be carried on in English, for it is only in the European languages that a sufficient literature exists for the purposes of such higher instruction. The second or higher course of technical training is by far more important than the lower, and it will necessarily precede the lower, as it is only by training a sufficient number of natives of this country in the higher standard that a supply of vernacular teachers will be created, which will be necessary to carry on the work of teaching in the lower standard of instruction.

The first aim, then, in initiating any scheme of technical education, will be the creation of a body of vernacular teachers who can afterwards carry on the instruction in the lower standard above referred to, for no true and lasting progress can be made unless the teaching of the higher grades is supplemented, however imperfectly, by more elementary schemes of instruction in the lower grades.

It now becomes necessary to formulate some definite scheme founded on the above principles which will be applicable to the present circumstances of Bengal, and which will be sufficient to stimulate technical education in the immediate future and which will thus have a definite and direct bearing on the industrial future of India. It is in carrying out this portion of the subject that the principal practical difficulty will arise. It is comparatively easy to formulate a complete and comprehensive system of technical instruction, and to do this all that would be necessary would be to quote *in extenso* such schemes of technical education as are at present carried out in Switzerland, Germany, Belgium, France and Russia, and which are now being fostered in England, and which systems of training have already proved their soundness by their success in those countries. Such schemes as these are, in their entirety, quite unsuitable to the conditions which obtain in India at the present time—first, from their prohibitive cost, and second, from the fact that the country is not in a sufficiently advanced stage to require such elaborate schemes of training, and that consequently even were such schemes attempted to be worked out in India, a large portion of them would necessarily fall to the ground, and be a failure, from the want of pupils to work out such courses, or from the want of employment for such persons, even if they had worked through the scheme. It is

also easy to put forward a complete scheme of examinations in technical science, and to give any number of syllabuses of study for these examinations, such as are given in the syllabus of 60 subjects issued by the Madras Educational Department. In such a scheme as this, however, practically no provision is made for teaching these courses, and it is difficult to see that any large amount of practical good can be evolved out of a scheme which only attempts to create persons who are capable of passing an examination in technical science subjects, but which in no way provides for their proper practical training in such subjects.

In devising a scheme for Bengal, it must be kept in mind that there are two classes of instruction required: the higher and the lower; and that of the two, the higher must be necessarily commenced first in order to provide teachers for the lower course, and it will in the first instance be necessary to work out a scheme for the technical instruction in English of those who may wish to become masters, manufacturers, teachers, etc., and while probably a single institution for working the whole higher course will be sufficient as a commencement of the higher technical training, from its nature the lower technical training would have to be much more widely diffused, and spread over various industrial centres.

As all trades, all industries, all manufactures are simply industrial applications of science or of art in their most extensive meaning, and as the special study of both science and art can only be properly engrafted on a sound previous general education, it will be seen that the training of all students up to a certain point will be identical, and in such previous training, as stated in the introductory part of this memorandum, the elementary principles of science, and also the fundamental principles of drawing, etc., should be included. Beyond a certain stage, however, divergence must commence, and those following the industrial applications of science will take one path, and those following the applications of art another, and the further the scheme is carried out, the greater will be the divergence. The general scheme of education might be the same up to a period corresponding to that at which a student at present will appear for the First Arts examination in the University, say up to about 17 years of age, and a student who intends to take up technical training in the higher branch, should at this period be well grounded in English, elementary mathematics, elementary chemistry and physics, and the elements of general drawing and of mechanical drawing, and it will be admitted that this will give a broad general foundation on which to erect any amount of special training afterwards. It will also be noticed that three out of these four subjects are already partly included in the F.A. teaching.

It now becomes necessary to decide in what direction at present technical training in India is necessary, and this is a question which will probably produce the most varied opinions. The various trades, industries and professions which may be made the subject of technical education may perhaps, for practical purposes, be classed under four separate divisions:—

Division A.—Applications of Science.

- „ B.—Applications of Art.
- „ C.—Agriculture.
- „ D.—Commerce.

Division A.—Under division A the following are the principal branches:—

Medicine, the technical instruction for the greater part of which is already fully provided in Bengal by such institutions as the Medical College and Campbell Medical School. This subject, however, includes veterinary medicine which is not yet provided for. Pharmacology is also a branch of this subject which has not yet received any sufficient amount of attention in India, and before long it will be necessary to take steps to provide for the education and examination of pharmacutists in the same way as has been done for medical men.

Civil and mechanical engineering, building, construction, &c., are provided for already to a great extent in the Seepore Engineering College, though probably a considerable extension would be highly desirable even in this case, particularly in the mechanical engineering direction, so as to include such subjects as Marine engineering, etc.

As these two branches are to a great extent provided for, they will not be considered in the present scheme.

Sub-Division 1.—Industries dependent on the application of chemistry, such as dyeing, calico printing and printing of textile fabrics generally, bleaching, paper making, sugar refining, glass manufacture, photography, soap and candle making, coal gas manufacture and artificial illumination, tanning and leather manufactures, etc.

Sub-Division 2.—Industries depending on the sciences, geology, metallurgy and mining such as require the employment of metallurgists, mining engineers colliery managers and geologists.

Sub-Division 3.—Industries dependent on the application of the physical sciences, such as electrical engineering, telegraph engineering, electro-metallurgy, etc.

Sub-Division 4.—The group of industries dependent partly on applications of physical science and partly on mechanical science, known as the textile industries.

Sub-Division 5.—Industries which are principally mechanical, such as manufacture of cutlery, locks, hinges, buttons, screws, nails, pins, needles, pens, electro-plate, watches and clocks, gold and silver working, jewellery, etc.

Division B.—The following will be the principal branches of technical training required with reference to the industrial applications of art:—

- Sub-division 6. Training for architects, artists, draughtsmen, designers, etc.
- „ 7. Training for engravers, wood engravers, etc.
- „ 8. Training for modellers and art potters.
- „ 9. Training for furniture and woodwork manufacturers.

Division C.—Training for agriculture generally, which will include instruction in chemistry (agricultural), elementary mechanics, physics, geology, biology, botany and the principles of agriculture.

Division D.—Training for commerce generally, including further study of English, of political economy, commercial law and economic science generally, mathematics, book-keeping, and physical and political geography.

I regret to say that I have no practical acquaintance with the subject of art teaching, and I therefore propose to omit the consideration of Division B in this memorandum altogether. The omission could, however, probably be easily filled in by any one who has been practically engaged in teaching art subjects.

Now, although the industries have been divided under four groups, and these groups into several sub-groups, it is clearly evident that in a large number of instances the subjects must necessarily overlap each other to a great extent, and it is therefore possible to arrange to group the earlier parts of the technical instruction under comparatively few general courses, and in the Divisions A, C, and D, probably the following comparatively few courses will be required. The length of instruction under Division A might be limited to three years, under C to four years, and under D to two years.

All the sub-divisions under Division A should take up in their first year, English, mathematics, chemistry, physics and drawing, both mechanical and free-hand. Instruction in chemistry and physics should be practical as well as theoretical.

In the second year of Division A all the sub-divisions should take up mechanics, and the instruction should be not only theoretical, but also, as far as the subject will allow, it should be treated from an essentially practical point of view. All the sub-groups should also take up geometrical and machine drawing, and should have general workshop instruction or teaching in the use of tools for working in wood and metals. This form of training would in Bengal probably be particularly valuable in breaking down the prevalent idea of manual labour being in any way derogatory,

Sub-division 1 of Division A in addition should take up advanced chemistry, both practical and theoretical, and also metallurgy.

Sub-division 2 of Division A in addition should take up mining, metallurgy and geology.

Sub-division 3 of Division A in addition should take up mathematics and advanced physics, both theoretical and practical.

Sub-division 4 of Division A in addition should take up designing with special reference to the formation and decomposition of patterns, and the theory and practice of weaving, both hand and mechanical.

Sub-division 5 of Division A in addition should take up more fully the properties and strength of materials, and perhaps metallurgy (elementary) and designing, in addition to an extended and advanced course of workshop practice.

In the third year all the sub-groups will diverge, and there will be no lectures in common.

Students of sub-division 1 of Division A will devote their whole time to the particular subject which they will subsequently follow in life, and in each year practical demonstration should be given in certain special subjects which could be selected from year to year as required.

In sub-division 2 of Division A, the course should be practical work at geology in the field (possibly with officers of the Geological Survey), and practical metallurgical work.

In sub-division 3 of group A, the instruction would be in the practical applications of physics to electrical engineering and telegraph engineering, etc.

In sub-division 4 of group A, the instruction might be confined to designing and to actual practical work in weaving, together with lectures and demonstrations on the dyeing and printing of textiles.

In sub-division 5 of group A, the instruction could be entirely confined to practical application in the workshop with special reference to the branch to be subsequently followed.

In Division C the four years' course might be sub-divided as follows:—

First year.—English, chemistry, physics, drawing, and physical geography.

Second year.—Chemistry (agricultural), mechanics (practical), machine drawing, and geology.

Third year.—Biology (and Botany), principles of agriculture, and agricultural chemistry

Fourth year.—Practical work on an experimental or other farm.

In Division D, the two years' course might be sub-divided as follows:—

First year.—English, mathematics, physical and other geography, book-keeping, economic science (*i.e.*, Laws of production, labour, wages, capital, finance, etc.).

Second year.—English, political economy, commercial law, economic science, and history and uses of commercial institutions.

It is not of course proposed that technical instruction in every one of the branches of trade, industry, etc., quoted above should be at first taken up, as this would be manifestly impossible, and is moreover not required at the present time; but the table which is now given, in which the above suggestions are embodied, will show what comparatively few courses of instruction are really required to provide for the entire technical instruction in all the branches enumerated, though, as the courses advance, the multiplicity of sub-divisions cannot be avoided.

1st Year.

English.	Mathematics.	Chemistry, practical and theoretical.	Physics, practical and theoretical.	Drawing, mechanical and free-hand.	Physical, mercantile and political geography.	Book-keeping
Division A " C " D	Division A " D	Division A " C	Division A " C	Division A " C	Division C " D	Division D.
Economic science (i.e., Laws of production, labour, wages, capital, finance, etc.)						
Division D						

2nd Year.

English (Modern with letter drafting, précis writing, &c.)	Mathematics.	Chemistry, practical and theoretical.	Physics, practical and theoretical.	Mechanical and machine drawing.	General workshop instruction.	Mining.	Geology and mineralogy.	Metallurgy.	Mechanics (practical).
		Division A, No. 1. Division C ...		Division A ... Division C ...	Division A (division A, No. 5 double course). Division C ...	Division A, No. 2.	Division A, No. 2. Division C ...	Division A, No. 1. Division A, No. 2. Division A, No. 5.	Division A. Division C.
Division D ...	Division A, No. 3. Division D ...		Division A, No. 3.						
Designing, with special reference to formation and decomposition of patterns, &c.			Theory and practice of weaving, both hand and mechanical.		Political economy.	Commercial law.			Economic science.
Division A, No. 4.			Division A, No. 4.		Division D ...	Division D ...			Division D.

3rd Year.

Chemistry, practical application to various branches.	Physics, practical application to various branches.	Mining, geology, &c., practical metallurgy and geological work, &c., in the field for	Textile industries, practical work for	Mechanical instruction in workshop for
Of Division A, No. 1	Of Division A, No. 2	Division A, No. 3	Division A, No. 4.	Division A, Section 5.
Biology and Botany.		Principles of agriculture.	Surveying.	
Division C ...		Division C ...	Division C ...	

4th Year.

Practical agricultural work in experimental or other farms.								
Division C ...								

In the present state of the discussion of the subject of technical instruction, and until the general principles of such a scheme as just sketched out are adopted, it seems premature to attempt to decide what branches of industry should be taken up for technical instruction; and further, it would be even more premature to attempt to give syllabuses of the extent of such courses of study. The point which, however, will be clearly seen in the table just given, is that the foundation of technical instruction in all industries is to a great extent common ground, and that when such a system is started, it ought to be commenced

on a broad basis, so that it could be subsequently enlarged to meet all requirements, without in any way altering its fundamental principles. It would be a manifest mistake to commence any limited scheme which would be subsequently found unfit for expansion, and it therefore appears desirable to commence with the broad general principles which are common, say, to the first two years of all technical training, and afterwards to extend the instruction to the other courses as occasion requires.

Another fact which also deserves careful notice, is that in the Divisions A, C and D, which have been treated of, some of the subjects are clearly those which are included in a system of art training, and on the other hand, it will be found that no system of art training will be complete unless several of the science subjects are also included. It therefore follows that in order to economise teaching power and to avoid the necessity of duplicate courses, it will be desirable to carry out in some central locality all the four great branches of technical training which have been grouped under Divisions A, B, C, and D.

As previously stated, one central institution would be sufficient for the higher technical training in Bengal, and such an institution will naturally be located in Calcutta. In order to fully utilize the present educational facilities under Government, it will probably be desirable to connect the new institution with the Presidency College, and undoubtedly some of the members of the staff could also be largely utilized in the scheme of technical instruction. The Art School could be removed from its present quarters, and located near the Presidency College, and with some additional buildings for workshops, and with larger physical and chemical laboratories, a commencement of the scheme of technical instruction could be easily made. Facilities already exist in the Presidency College for teaching such subjects as English, mathematics, chemistry, physics, physical geography, political economy, etc.,—all of which are required in the schemes of technical instruction before laid down, and all that would be necessary would be to provide increased facilities for teaching these subjects thoroughly, and in all cases possible also *practically*, and to add facilities for teaching drawing, mechanics, workshop instruction, etc., as required in the above scheme. A considerable expenditure would undoubtedly have to be incurred in the removal of the Art School and in the erection of workshops and laboratories, and in providing tools, machinery, apparatus, etc., but the cost of this would be small in comparison with starting a scheme of instruction, from its very commencement. In addition, too, the scheme would require the employment of several new teachers or professors, but I may perhaps be allowed to suggest that it is a point which might be well considered by Government, whether the time has not now come when more good might be done by concentrating the energies of the Education Department in developing a comprehensive and practical scheme of technical education, rather than in keeping up higher or college Government education in parts of the province, where private educational enterprise is already beginning to make its way, or where, from the smallness of the demand for higher education, the cost of maintaining an expensive teaching staff is almost prohibitive. It would also be necessary to have small museums of technology in the central institution, the collections in which would be required for teaching purposes, and it would therefore appear necessary to create a new "Technical College and Museum."

It is not, however, intended to suggest that the Presidency College should become itself entirely a technical college, but rather that a new institution should grow up by its side, which would deal with the technical side of education, while the Presidency College would continue to deal with the literary side of education, for the Presidency College should really be a model literary college to act as a standard for private colleges to work to. The advantage of locating the two institutions in close proximity would be that there would be a vast saving in teaching power, for in all systems of education, whether literary, technical and scientific, or artistic, there are many subjects which are common to all, and which can be equally well taught together. For many reasons it would be desirable also that the technical institution should be managed by a separate head, and by a committee of its professors and teachers, and not be under the same actual management as the Presidency College, for this is to a great extent a literary institution only, and it is governed with all the traditions necessary in such cases.

Beyond these broad suggestions as to the establishment of a Central Technical Training College, it is not necessary at the present time to go into further details, as these could be settled readily, and would probably be best discussed by a small committee of experts, if the broad general principles of such a scheme were approved of.

The foregoing appear to be all the points which in the present state of the discussion it is necessary to take up with regard to the higher or (English) technical training. As before pointed out, it is essential that this portion of the scheme shall precede the introduction of the lower or vernacular technical training, from the obvious fact that teachers for the lower scheme of training do not yet exist, and will have to be brought forward by the higher courses.

It may still perhaps be worth while to sketch out briefly the lines on which such lower instruction should be carried out. It will in the vernacular teaching probably be found necessary to have both day and evening classes of instruction, for the only way of improving the condition of the classes who are daily engaged in working for their living is to provide them means of instruction after their day's work is over. Both day and evening classes and practical demonstration in such general subjects as drawing, elementary science, mechanics and general workshop instruction or teaching in the use of tools for working in wood and metals, etc., the instruction being given in the vernacular, should therefore be established by Government in connection with the Central Institution, above proposed, and the students who have passed through the higher training

should be encouraged in every possible way by the granting of rewards on their students passing certain examinations, or by the granting of rewards for certain courses of lectures delivered before certain classes of students, to take up this work of vernacular technical training. The starting of such classes of practical instruction would necessitate a slight extension of the buildings of the Central Institution, but the cost would be comparatively small. For outlying localities in connection with other industrial centres, the Government would have to give grants-in-aid towards the erection of workshops and laboratories, and towards the supply of machinery, tools, and apparatus, and also grants-in-aid to such teachers for passing their students at periodical examinations, just in the same way as is done in England by the South Kensington Science and Art Department, but here, again, the cost would be small in comparison to the amount of good gained. Much, however, might also probably be done by judicious Government encouragement in persuading influential native gentlemen and communities to come forward and establish small vernacular technical schools at various centres of industry, the Government also contributing to their starting and subsequent support; but again in this place it is not necessary to formulate any definite rules for such cases. In the first instances probably the technical institution at the outlying centres of industry would be best started in connection with such Government colleges as the Dacca, Patna and other colleges; the proposed technical and art schools being affiliated on to the Colleges already existing, in the same way that has been suggested for the Central Institution in connection with the Presidency College, but in the outlying centres the teaching should probably only be taken up to the lower standard.

The subjects which would have to be taken up in the lower or vernacular system of technical training would be to a great extent similar to those already quoted under the superior system, but Division D would be excluded, and only Divisions A, B, and C taken up. The standard would, however, undoubtedly have to be much lower, and care would have to be taken to subordinate the theoretical to the practical instruction. As before stated, no workman can perform his task intelligently unless he understands the general principles on which his work depends, and thus drawing in all its branches, practical and theoretical, chemistry and physical science, mechanics (practical), general workshop instruction or teaching in the use of tools for working in wood and metals, and elementary mathematics, will be the foundation on which all vernacular technical instruction will be based. The technical training in the vernacular standard would be very much facilitated by the introduction into primary schools of elementary vernacular scientific instruction, and also of drawing, and perhaps also of elementary lessons in the use of tools, and with such a preliminary training the progress of vernacular technical training would be comparatively easy. In the lower training also probably far more attention will have to be given to the practical workshop training, than is given in the higher instruction.

It may perhaps be objected that the present proposals are too elaborate and too costly. It is, however, not intended to propose that the whole scheme should be introduced at once, but rather that a beginning should be made on the lines laid down, and that there should be a gradual extension of the system as necessity arises. By commencing, however, on a broad basis there would be a good foundation for any subsequently required extension, and nothing less than the outlines of a broad and comprehensive scheme should be attempted or indeed will suit the necessities of India, as in the immediate future it may be expected that rapid extension will be required, and this would only be possible when working with a general scheme.

With reference to the cost of the higher or English technical instruction, it will undoubtedly be large, but taking into consideration the expenditure on such a literary college as the Presidency College, and also the expenditure on such an institution as the School of Art, it may probably be safely said that if a plan like that previously proposed of removing the School of Art and of adding a technical institution to the present Presidency College were carried out, the cost of the Central Technical Institution or College would not altogether be more than one and a half times the present amount. The cost of the lower or vernacular technical instruction would also be considerable, but in the case of Calcutta, where it would be provided for by an extension of the higher instruction, it would be comparatively small. It is also probable that by judicious encouragement of native liberality and by the plan of grants-in-aid, the expenditure on the lower vernacular system even in the outlying centres of industry could be kept within moderate limits.

REPLY TO DR. RAJENDRALALA MITRA'S REVIEW OF MESSRS. ELIOT AND PEDLER'S SCHEME FOR THE REORGANIZATION OF THE PRESIDENCY COLLEGE.

Calcutta, July 23rd, 1887.

DEAR DR. MITRA,

WE desire to thank you most heartily for the careful and exhaustive criticism of our note, and also for the sincere recognition of the motives which led us to prepare and publish it. We were not vain enough to think that our suggestions would be considered as a satisfactory solution of the problem of the introduction of higher education, or that they would obtain general approval. We were mainly desirous to raise the subject, a most important one, into the plane of discussion. And we hoped that even if we gave very imperfect expression to the apparent growing demand for higher, more thorough and rational education in Bengal, the subsequent discussion would serve not merely to emphasize our remarks, but direct the attention of Government to the subject, and indicate the lines of change that would meet with general approval, and satisfy the legitimate wishes of the more intelligent members of the native community in Bengal. Our proposals have been very fully discussed in many of the more influential newspapers, and various suggestions made, many of which are deserving of the fullest consideration. So far our object has been fully attained.

Your criticism is one of the most thorough and searching to which our note has been subject. We infer that you are entirely opposed to every one of the changes, major and minor, that we propose. Naturally we regret this, as we counted on the intelligent support of a large proportion of the leaders of native opinion, many, if not all, of whom we believe are not only in favour of retaining the Presidency College, but of giving it a larger and higher field of work, than it at present fulfils; work too, which would in no way clash with the existing excellent missionary and native collegiate institutions. We feel it is very probable you represent the opinion of a large number of your countrymen, and it is therefore incumbent on us, if we have any faith in our proposals, to examine and meet your objections. We wished them to be discussed candidly and freely, and if they were unsatisfactory and unsuited, either to the people or the present circumstances, to be rejected on these grounds. It is hence very disappointing from that point of view, that you have put a very different complexion upon

several of our proposals than we intended, and we also think not justified by what we said. This we feel is partly due to the fact that the question with which we were dealing is a very large one, and we were for the sake of brevity compelled to state our views more concisely than was perhaps desirable for their full comprehension. You will therefore, we feel sure, in the interests of a fair discussion on such an important subject, be glad that we should have the opportunity of stating our opinions more fully and clearly on some of the points, and thus meeting the more formidable of your objections.

Before dealing directly with the main points of your criticism, you will, we trust, not think the following general remarks out of place in partial reply to some of your statements. Our chief object in writing the note was undoubtedly to raise the character and methods of the higher education in the Physical Sciences and Chemistry. As professors of these subjects in the Presidency College, we are desirous for the sake of the college and the students who attend it to make the theoretical and practical teaching in these subjects as efficient and thorough as possible under existing circumstances.

We do not, however, wish to see undue prominence given to our subjects, as we are certain that the inevitable reaction which would set in, would do far more harm, than any special advantages arising from undue encouragement for a short time. We also believe that true progress must necessarily be many-sided, not in one, but in all directions. We wish to see scientific and technical teaching of the highest kind established on a proper, rational and intelligent basis, in co-ordination with higher education in other subjects, such as languages, literature, psychology, history, &c.

We do not believe any of the real or imaginary grievances under which the country suffers are to be immediately and entirely remedied by substituting technical or scientific education for literary education. There is, however, one thing that appears to us absolutely certain viz., that if India wishes to compete with Europe successfully in manufactures and commerce, she cannot do it merely by cheap labour, for that has failed as experience has shewn. She must be prepared to train and educate herself, to adopt those methods

which have been successful in Europe. Capital, skill, energy, and scientific knowledge are far more necessary than cheap labour. It is by the exertion of energy and prudence, by honest and persevering work that a nation can prosper and rise in the scale of material civilization. But energy guided and controlled by knowledge is far more efficient and economical than untrained energy, and one of the chief signs of the progress of a people and of its determination to improve its position is the demand for higher and better education. It is a healthy sign when a more rational and therefore more practical education is sought for by the people, and the Government assists in satisfying that desire. It is not an encouraging sign when the Government has to initiate and foster education, except in the earlier stages. Hence we are by no means such ardent admirers of Government colleges as you appear to be, and are glad to see independent institutions such as the Metropolitan Institution springing up and flourishing. It was from the same belief that we commenced our note by suggesting that the establishment of a Teaching University at Calcutta in its most complete form should be due to the efforts of the more intelligent part of the community itself, and be based on a feeling of the necessity of higher education for the development of the intellect of the country.

We are acquainted to some extent with the Science colleges and Technical schools in England. One of these, the Technical Institute in Exhibition Road, London, has been created and is maintained by the City and Guilds of London in order to provide the highest technical training in mechanical, chemical and electrical engineering. Government gave no assistance and has no voice in its management, nor does it examine its students directly by inspectors or indirectly through any University.

It not only teaches its students but examines them and grants certificates. It has been established by one of the largest and most intelligent mercantile and commercial communities in the world, the members of which have no great respect for the degrees of the London University. They recognize that something more is required at the present time than general education as tested merely by examinations, in which cram plays so large a part, in order to supply men qualified for the superintendence of large manufacturing establishments, and to stimulate technical skill and invention. A sum of £10,000 was assigned to purchase apparatus, to commence the Institute on a satisfactory scale, and we believe that large amount has been found to be insufficient, and have been informed by one of the professors that nearly £20,000 has been already spent for apparatus. There is a small staff of Professors aided by a large number of demonstrators and assistants to superintend the experimental work of the students. Probably at the present time there are not more than 50 or 60 students. We have not the slightest doubt

a rigid economist might prove that it is a great extravagance, and that the money would be more profitably spent in establishing ordinary day schools in the East end of London. We prefer the action of earnest, thoughtful people carrying out what they consider best in their own way and at their own expense, to the sentimental or theoretical views of an economist, or philanthropist, and we believe the establishment of such institutions as the City and Guilds of London Technical Institute to be one of the most important signs of the times.

The changes we suggested, and the methods we proposed in our note are neither utopian, nor are they based upon *a priori* views of our own. They were suggested in part by our own experience in India, and in part by the direction in which educational changes are progressing in Europe, and more especially in our own country.

The methods we are advocating, it appears to us, ought to commend themselves to you, for we wish to apply the same general method to the higher teaching of the science subjects, that you state to be essential to make good English scholars. You say that the students who are taught in our colleges now do not write and speak English as well as those who were trained under Major D. L. Richardson. Whether this be a true bill or not we leave to others to determine. But we believe you are right in principle. Professors, lecturing to large classes in our colleges, undoubtedly tell their pupils how to do a thing, but do not help them to do it. We do not wish our students in the Physical Science subjects to spend their whole time in college in listening to lectures and learning what others have done and how they have done it. We wish them to spend a large portion of their time in the laboratories, using the apparatus and performing the experiments themselves. We wish them to learn to employ their own eyes and hands as well as their brains in questioning nature, and not merely to take notes of lectures and learn them, or to write out results and criticize the work of others. If they carry out the experimental methods we propose under careful supervision and guidance, they will be trained men, men able to act and think for themselves, and not merely equal to passing examinations and qualifying for Calcutta degrees. It is even possible that they might, in some cases, take such an interest in scientific work and enquiry as to make it the basis of their future life's work, and assist in the extension of science by independent investigation.

An institution, which would give to students who have already received a good general education that higher theoretical and practical training in the Physical Sciences, Chemistry, Botany &c. such as we contemplate, requires well-equipped laboratories and lecture-rooms, provided with assistants as well as professors. Such an establishment is necessarily costly, and the fees cannot be fixed at such a rate as to attract those who will most greatly benefit by the education, and

at the same time cover the working expenses of the institution. There is no country in the world where such a result has been achieved, and it is certainly not to be obtained in India.

Hence we think at the present time and until a real Teaching University can be endowed by native munificence, that this work will have to be pioneered by Government in the same way that the present collegiate education was started and fostered by Government.

If such an institution is to be established in Calcutta at an early date, the simplest and most effective plan appears to be the adaptation of the Presidency College, which is no longer a necessity in its present form, but which, if it could be developed into a useful and necessary institution in the scheme of education in Bengal, would doubtless continue to receive adequate support from Government.

You state that our scheme in its entirety contemplates the abolition of the Calcutta University. The scheme we suggest for present consideration and adoption has no such object in view. We seek rather to add to it, to crown the edifice. It would not be like a growing creeper which crushes and kills the tree that supports it, for we believe, it would bring increased vitality and larger action. Our whole scheme is based on the supposition that the extension of the Presidency College should be an addition to the University, and work with it, and be subordinate to it to some extent. We endeavoured to show that the University might gain largely in many ways by utilizing the higher professors as moderators in its examinations. We proposed that the Professors should be the examiners for the higher degrees, and that the University should confer them. How this can be construed into a scheme with the abolition of the Calcutta University for its ultimate object passes our comprehension. We believe the Calcutta University is useful as an examining body, and that on the whole it is the most efficient of the five examining bodies, called Universities that have been established in India.

We also believe a teaching University to be a necessity, and that it can be grafted on to the present University. If, however, it cannot, if the charter of that institution which was established for the promotion of sound learning is not large enough to include it, and cannot be modified, it will not prevent and probably not much delay the establishment and growth of a teaching university or higher college, and the present University will be lowered in public estimation, and suffer by being divorced from the highest education in the country.

You attempt to prejudge the question by a casual reference to the opinion of men whom you call the foremost thinkers of fifty years ago, and of whom Lord Brougham, in your opinion, was the representative, and by whose efforts the London University was established. If you had said the most prominent talkers of fifty years ago we might agree with you. You say with cheerful

confidence that it is too late in the day to revive the discussion, and that nothing has transpired to show that Lord Brougham and his colleagues were mistaken. Unfortunately time has not been on the side of Lord Brougham. There are a much larger number of Englishmen now than then who believe in the older universities, and who object to the application of the term university to the London University and similar institutions. It is this degradation of a noble word which has compelled the opponents of the principles, of which Lord Brougham was the exponent, to introduce the term teaching university. The history of free education in England during the past 20 years (and not the Government enforced education of the lower classes) is a sufficient reply to your statement. Oxford and Cambridge have extended very largely, and mainly in the direction of teaching. The number of University Lectureships has been very considerably increased. The Cavendish laboratory has been built and equipped at Cambridge, and has already done splendid work under Professors Clerk Maxwell and Lord Rayleigh. Similar university laboratories for Chemistry and Physics have been established at Oxford, and worked very successfully under Professors Odling and Clifton for many years. A large teaching university (at first called Owens College and now known as the Victoria University) has been established at Manchester. Colleges such as the Mason College at Birmingham, the University College at Bristol, the Yorkshire College at Leeds have been opened during the past few years. In fact, Colleges and technical schools have been established at nearly all the larger towns and many of the smaller ones. Amongst them may be especially mentioned the Kensington Science schools of which Professor Huxley was for many years the Rector, and the City and Guilds of London Institutes at Finsbury and Kensington already referred to. The Durham University under the pressure of public opinion in the large manufacturing town of Newcastle on Tyne established a subordinate Technical College in that town some years ago, in which a body of able professors (amongst whom were Professors Aldis and Herschel) gave lectures and superintended laboratory work in the physical and natural sciences, more especially those which have especial reference to the local industries. That even this is not considered sufficient is shewn by the fact that the English papers which came by a recent mail describe briefly the laying of the foundation stone of a new "College of Science" by Sir William Armstrong at that town.

Even in London itself, King's College and University College which have hitherto occupied positions with respect to the London University very similar to those of the Calcutta Colleges with the Calcutta University are by no means satisfied with their position. About the time when we were drawing up our note, English periodicals were giving details of a proposed teaching University in London which, we

believe from later accounts, has every chance of being established. This teaching University is to be formed by the amalgamation and extension of the King's and University College. The following extract from the report of the University College London received by the last mail from England states the present position.

"Yesterday the distribution of medals, books, and certificates was made by Professor Erichsen in the presence of Sir George Young and other members of the council, the professors, and a large audience of students. The proceedings began with the report of the Dean of Faculty, Dr. Porre. The diminution in the number of students who had attended the classes during the past year was attributed principally to the establishment in the chief centres of population throughout the kingdom of rival University Colleges. It was possible that at no distant date the students would be able to obtain their degrees without the necessity of repairing to Burlington-gardens, which had too long usurped an important part of the functions of University College. They had joined hands with their former rival—King's College—for the establishment of a degree-giving University. The chairman in his address referred at some length to the efforts being made to establish a teaching and degree-giving University in London."

Your appeal to the facts of fifty years ago does not settle the question. We are living in the year 1887, and if you will study the present development of higher education in either England, France, Switzerland, Germany or the United States you will, we feel confident, lose your faith in Lord Brougham. Battle-axes and clubs are undoubtedly weapons of great antiquarian interest, but an army provided with these imposing weapons would fare very badly against one with repeating rifles and machine guns, and the same is true in education. The range of knowledge is larger, the means of investigation are much more exact, and it is necessary that people should at the present day learn more quickly and systematically than they did in the good old days of yore.

Your reference to Lord Brougham is especially unfortunate in this case. He had the superficial knowledge and the passing interest in science of an advocate and no more. He appealed to Newton's Corpuscular Theory of Light as he would to an old legal precedent, to be quoted but not disputed. He argued with exhaustless eloquence in favour of that theory, but lost his case. For as you may know the chief recollection of him in the world of science is that he used all his powers of ridicule and sarcasm, and the influence of his high position to cast discredit upon the researches of Dr. Thomas Young, the predecessor of Dr. Tyndall in one of the Professorships at the London Royal Institution. This he did so effectually as to compel Dr. Young to discontinue his researches, the first which threw doubt on Newton's Corpuscular Theory and which suggested and almost established the Undulatory Theory. Lord Brougham's efforts were as ineffectual in stopping the march of science as Mrs. Partington's were in restraining the advance of the Atlantic. The only result was to give to France and not to England the glory of establishing the Undulatory Theory of Light upon a firm and impregnable basis. The Undulatory Theory was taken up by Fresnel from Young with the result that he has made the grandest contribution since

Newton's Principia to our knowledge of the Physics of the Universe. Your appeal therefore to us to accept with unhesitating faith the London University as the perfect type of a university and Brougham as an ideal legislator, for that portion of higher education which shall serve as the basis for progress and advancement in scientific knowledge, awakes no sympathetic chord in us. We distrust your authority and have no great respect for your model university.

You inform us that the Calcutta University by the terms of its charter has and can have nothing to do with direct instruction, and that its functions are confined to prescribing courses, examining candidates and conferring degrees. On the same principle, a doctor has nothing to do with the general health of a patient because he only prescribes physic, examines him when he is ill, and writes out a certificate of death when all is over. It is possible you may be right technically. You appear however to forget that the University like a policeman or other similar public functionary can and does exert influence. And we assert without fear of contradiction that its influence has not been altogether satisfactory. It is certainly the opinion of many professors and teachers and also of men outside the Government Education Department, who view education probably from a different stand point from ourselves, that students attend the colleges merely to prepare for and pass the University Examinations, and that the teaching in the Colleges has to be subordinated entirely to the requirements of preparation for the University Examinations. The students are not taught English for example, they are simply prepared to pass the subject of examination for English.

In our opinion it does interfere in instruction in various ways. For example, for ordinary students it prescribes attendance for a definite number of times during a certain period (two years) in certain institutions (recognized as affiliated to itself), and if a candidate be not qualified in this respect he is, no matter how clever he may be, not allowed to appear at the corresponding examination. It seems to us that the appointment of A or B by Government to teach in a College is a very trivial matter so far as education is concerned compared with this regulation.

If the Calcutta University be a mere examining body, and not an institution for the promotion of sound learning (which is not identical with learning as practised by some students), why does it recognize Colleges at all. Surely if the possession of the knowledge and not the mode of its acquirement is the important thing, why does the Calcutta University refuse to allow candidates to appear at its examinations, who believe that they are able to pass the examination, and attest their belief by their willingness to pay the fees. If you will examine this as critically as you have done our proposals, you will, we feel sure, be able to detect not merely a hardship, but what you describe as "a tax on education."

Again, if the Calcutta University be a mere examining body, and there are students who, as you concede, are able without undue mental or bodily strain to prepare for the F. A. or B. A. examination in one year, why should they be compelled to pay college fees for two years, and waste one year of their lives, in order to qualify by attendance for the privilege of appearing at the University examina-

tions. Adopting your examination standard, apparently a student who is able to prepare and pass the examination in one year is an inferior being, and only worthy of discouragement as compared with the student who requires two years to prepare himself for the same examination. Quickness in the acquisition of knowledge is evidently a disqualification. On the same principle, we presume the student who fails once and passes only after three years' preparation is a higher product, a more worthy representative of Calcutta University-culture and the F. A. or B. A. *fail* should be at once recognized as the highest and most honored degree of the University.

In the sixth paragraph of your criticism you sum up briefly our proposals, and thence proceed to criticize them as thus stated. Unfortunately the summary does not represent adequately our suggestions or opinions, and a large portion of your discussion is directed rather against the creations of your own brain than the suggestions of ours. It will be sufficient to take some of them, and point out rapidly our objections to your statements.

You say our first proposal is "the reduction of the period of the F. A., the B. A. and the M. A. courses to one academical year instead of two years." We proposed that the complete course of lectures on each subject, for instance mathematics, should be gone through in one year. They will be repeated in the following year, and any student if he chooses can go through the whole course once, twice, or thrice in as many years, which is virtually what is done at present, only in the second year of each period for the F. A. and B. A. it is called revision, which is less effective and more wearisome for both professor and student. There is therefore no limitation or reduction of course in the proper sense of the word. Our proposal would probably be an improvement, even if the University do not make the concession as suggested viz. to allow students under certain conditions to pass on to the B. A. course and M. A. course in a shorter time than is at present possible. These remarks hence also shew that our fourth proposal as stated by you "the doing away with the second year's course" does not cover our meaning. It may be true as a college arrangement for lectures and subjects, but it is not true for the student himself. He may, if he chooses, spend one, two, or even twenty years in going through either the F. A. or B. A. courses, if he is willing to pay the college fees and attend the lectures. It will be for the student himself to determine whether his abilities and power of work will enable him to qualify in one or two years for the F. A. or B. A. examination, and he will go as he does now to whichever college will enable him in his opinion to prepare best and most cheaply for it.

You state our second proposal to be "the curtailment of the present courses to adapt them to the reduced time" and in further explanation of this you say that "we feel sure that most of the students can not master the present F. A. and B. A. courses in one year, and we accordingly recommend to curtail the present courses to adapt them to the reduced time." The first half of the latter sentence certainly represents our opinion, and we should regret very much to see the courses reduced so as to enable the average and inferior students to pass in one year. We merely wish that the clever student might have

permission to appear after one year's study at college, and if he passed with considerable credit (that is not merely scraped through) he might be granted the certificate or degree, and permitted to prepare for the next stage. But there is nothing whatever in our note which can be fairly construed into a suggestion to reduce the F. A. or B. A. courses. What we said was "these changes would probably require that the courses for the M. A. subjects should be curtailed to some extent and re-arranged." This, which appears to us a perfectly definite statement, quite different from the interpretation you put upon it, had very simple reasons for its origin. We were chiefly responsible for the limits of the revised M. A. courses in Mathematics, Chemistry, and Physics adopted in 1883. At the time when they were drawn up there appeared to us to be a strong probability that the period of preparation would be extended from one to two years, and we drew up the courses in these subjects rather for the longer than for the shorter period. The period was extended from 12 to 18 months, and not to two years. Our experience certainly shews that the present courses are somewhat too long for 18 months, if they are to be thoroughly and intelligently studied, and a sufficient amount of laboratory work is to be done by the student. Modifications have already been proposed in some of these courses, separating the practical from the theoretical. Hence as we believe this separation to be a great mistake and as we proposed to revert to the original practice of a single year's course for the M. A. examination, we thought it advisable to suggest briefly the desirability of some modifications and slight reductions. We wished the course to represent no more than an intelligent student could reasonably be expected to study and master in the time allowed. We desired the courses to be real and not ornamental. Your arguments based upon what we did not say may be a valuable addition to polemical literature, but in no way assist in separating the wheat from the chaff in our proposals.

Your statement of our third proposal is "the admission into College of none but students passing in the 1st and 2nd division of the Entrance Examination, in other words to confine the College to clever students only." Here again you evolve from our note what we are unable to find in it ourselves. We recognize most fully that the Presidency College is not merely a place of education, but that it is maintained in part by Government from the general taxation of the country. Such a college ought to be free and open to every one who pays the fees. We maintain that any one who wishes to attend any of the College lectures, quite irrespective of whether he contemplates appearing at any of the University Examinations, has the right to do so on the payment of the ordinary fees sanctioned by Government. Private and Missionary Colleges have by their very constitution a power or privilege in this respect which a Government College cannot and ought not to possess. Possibly clever students might be attracted to the Presidency College whilst ordinary students, who could obtain the education they require to enable them to pass the University Examinations at the intervals now arranged at a much smaller cost than at the Presidency College, would continue to resort to the private Colleges. But this, in our opinion, would be an advantage to the native colleges and we also believe to the Presidency College, as we view its

functions. That institution should be if possible a model of the highest teaching in Bengal, and that certainly requires and demands intelligent and clever students as well as able professors. Hence we neither proposed nor contemplated any arbitrary selection of students by the Principal and we object *in toto* to your ascribing to us a desire to close the College to any one, whoever he may be, who wishes to attend the College lectures, or to experiment in the laboratories under the same conditions as the ordinary students.

You describe our sixth proposal as "the enhancement of the rate of the College fees." Here again you have converted a particular into a general proposition. We referred incidentally to the fees to be charged to students in the higher classes (i. e. beyond the M. A.) in the following words. "It will thus be seen that without any practical increase of expenditure to Government or extension of the period of student life, clever and intelligent native students might have a higher training for two years nearly equal to that of the European Universities. The fees might be raised *slightly* and more liberal scholarships awarded to assist poorer students." The higher fees evidently refer to the two years of higher training, just as the more liberal scholarships to poor but clever students as clearly refer to the same period, and were suggested in order that poor and really capable students might not be hampered by pecuniary difficulties in the highest stages of their education. You ignore the second half of the suggestion, generalise the first half, and conclude the argument with the statement that education should be cheap and not dear in a poor country like India. The first requirement of education is that it should be good and sound. Bad education however cheap it may seem to be is always dear. As to whether it shall be paid for entirely by those educated or in part from the revenue of the country is a question for which there is much to be said on both sides.

Our ninth proposal you give in the following words:—"The limitation of the period of session for each course being 8 months, the other four months of the year being devoted by the professors to their home in Europe, one half of their travelling charges being granted by Government."

Here again our proposal is so maltreated, as to be almost unrecognizable, and it appears to be hardly fair criticism to alter what was intended as a suggestion for the advantage of our proposed institution into the offensive form in which it was here presented. There is no country in the world in which any University or College institution prescribes where its professors shall spend their College vacation. And we do not even imagine that you desire the Government of Bengal to order the Presidency College Professors to spend their vacation in Calcutta, shut themselves up in their rooms, and read and note the text books for the next session. During a vacation, students and professors are free to go where they please. In suggesting therefore that the professors might visit England, we were not thinking of what the professors, if they were human beings with some of the instincts and affections, that are not peculiar to either the Hindu or Englishman, would perhaps do occasionally, but of the desirability of their spending the vacation so as to improve their experience and knowledge in their special subjects, and thus benefit the Presidency College or University. We had in view mainly one

object viz, that the science professors should be encouraged to keep abreast with the progress of laboratory work in England and the Continent, and that they should be utilized to obtain more satisfactorily and economically the scientific apparatus required for experimental work, than is possible under present arrangements. At the present time scientific apparatus is indented for by a long round-about method through various Indian Departments from the Secretary of State. It is purchased by a Department that has no special interest in the Presidency College, nor experience in the class of apparatus required. Consequently the apparatus that is sent out in compliance with an indent is frequently not what is wanted, and the waste of money and delay that thus occurs would cover half-a-dozen times over the cost of carrying out our suggestion even on the widest scale. If the laboratories at the Presidency College are extended, as we propose, much larger amounts of apparatus will be required in future. The simplest and most efficient plan to obtain exactly what is wanted, and as economically as possible, would undoubtedly be for the professor, if he were in England to select the apparatus himself. The suggestion therefore was not that the professor should devote his vacation to England, but that he should have the interests of the College at heart even during his vacation, and be ready to spend it in occasionally visiting Europe to learn the latest additions to his science. And if he were asked by Government to devote a portion of his vacation to the task of examining and selecting apparatus, the Government might very properly pay a very small portion of his expenses. However, if you really think that a Government Department in England is more likely to send the best apparatus and at the least cost, and the professors of such an institution, as we propose, are not to be trusted in such matters then you are quite right to object to our proposal. We wished to make no conditions distinctive between one set of professors and another, and hence it was that we expressed our suggestion in a very tentative manner. "*It might deserve the consideration of Government whether professors should be encouraged to go home by grants of half the passage money if they went for some definite object connected with their work or subject of lectures.*" Considered merely as an abstract question, we repeat as the result of our experience that if ever a teaching university be established in Calcutta, the best policy of the authorities will be to encourage the lecturers or professors of the scientific subjects to visit Europe frequently, and the chief gainers by this will not be, as you think, the professors, but the students, and the college, and therefore finally your own country.

A few words more on this proposal seem necessary. We suggested that there should be two distinct bodies of professors, one who should teach the F. A. and B. A. classes, and who would therefore have the same sessions and vacations as the Mofussil Government Colleges, the other who should give lectures to the M. A. and higher classes, who would be of higher standing than the previous, and work under different conditions. We proposed most distinctly that their courses of lectures should extend regularly and continuously over a period of eight months in each year. We also suggested for the sake of our students that these latter professors should

not be granted furlough. You prove by a mathematical sleight of hand that eight months really means four. If such be the case, all discussion is at an end, and language then becomes a medium not merely for concealing but perverting thought. By eight months we meant eight months, neither more or less, during which the professors would be bound to be in Calcutta, give the courses of lectures at the regular intervals laid down by the college authorities, complete their course within the time specified, and superintend the laboratory work. By withdrawing the privilege of ordinary furlough there would be none of those frequent changes of Professors such as at present occasionally affect the student's progress, and even influence and modify his line of study. The same professor would lecture on the same subject year after year, and obtain a fuller and wider grasp of it, and learn more fully the difficulties of students, and the best methods of overcoming them. And the advantages we maintain would be greatly on the side of the students. Our sole thought in making the ninth proposal was the progress of the students, and the welfare of the college in its higher Department.

It would be equally easy for us to prove by taking into consideration that all educational officers are at present entitled to furlough at the rate of one year for every four years of service, that those professors who take free advantage of furlough need not work more than $2\frac{1}{2}$ or 3 months a year. But this is a form of argument that appears to us utterly out of place. The work of a professor is not estimated by the number of hours he talks. Such a principle may do in valuing the work of a coolie or mechanic, and if the Government and your countrymen do not take a more liberal and rational view of the work and position of a university professor than this, you will never have a university worthy of the name.

There are some other points we shall notice as briefly as possible. You are apparently not aware that there is a Professor of Arabic and Persian at the present time in the staff of the Presidency College. The number of Mahomedan students is quite sufficient to justify the appointment, and is yearly increasing, probably owing to the increased intellectual activity amongst the Mahomedan community. Why you should wish to exclude Mahomedans from the advantages of the Presidency College is more than we can understand. It would not merely be unfair, it would be a political mistake.

We did not suggest the abolition of the Sanskrit College and the Madrassa as you apprehend. On page 12 we said quite clearly that under our proposed scheme, the secondary education up to the B. A. degree in Arts and Sciences should be carried on in the Presidency, and the four Mofussil Colleges (that we proposed to retain) the *Sanskrit College, Madrassa* and the various private Colleges. We suggested partly in the interests of economy that the Principals or certain of the Professors in these two institutions should be placed also in the higher teaching staff of the Presidency College to give higher teaching in the Oriental languages than is at present afforded at any Government College in Bengal. This would elevate the status and work of the Professors in question, and would, we believe, react on the Sanskrit College and Madrassa, and probably give a higher character generally to the oriental teaching in these institutions.

You condemn our proposal to abolish certain of the present Mofussil Colleges at Government Colleges. The Government has already adopted the policy. We merely suggested an intelligible principle on which it might be carried out, and the savings thus effected be utilized to extend education in a direction in which it is notoriously deficient, and not be allowed to lapse as general savings. Perhaps we did not express clearly enough our hope that these colleges would not be allowed to pass out of existence, and our belief that education is now sufficiently valued by the middle classes in Bengal for them to take active measures to maintain any college from which Government partially or entirely withdraws its support. Such is our belief based on what has already been done in the case of the Agra College in the North-West Province, and the Berhampore, and Midnapore Colleges in Bengal. You grant the necessity for higher education, you earnestly pray for it. Yet in the same breath with which you say this you add that you would prefer that Government should educate out of the general taxation of the country forty or fifty ordinary F. A. Students at Chittagong, rather than that it should give at a somewhat greater cost the highest education to the same number of the cleverest and most intelligent of the students in the whole country, the men who may be the leaders of thought, and action in the future. There is no mistake as to your preference, for you say, "I would prefer to have every individual of our community moderately trained in collegiate learning to having a dozen transcendental scholars and the rest of the community immersed in mental darkness." The last is an impossibility, thanks to the vast progress of education. The first half of the statement, which, is only applicable to the present circumstances may, in your opinion, be what is termed liberal education, and spring from the highest patriotism and devotion to your country, but to our matter of fact minds, it seems to be the bathos of college education, the nadir of learning. Government is in your opinion to do nothing for the highest education until the credentials, the passport for service of the Calcutta Pankah Coolie is a certificate showing that he has been "moderately trained in collegiate learning."

We suggested that the higher Professors of the Presidency College should examine for the higher degrees, and that the Calcutta University should confer the degrees. This hence meets your objection against the Presidency College conferring degrees. The Professors of the Presidency College are and have, for many years, been very frequently called upon by the University to examine for the higher degrees. For the higher examinations it is especially necessary that the examiner should be thoroughly qualified by knowledge, and that the examination test should be uniform. The plan we propose for the examinations for the higher degrees is that in use in all the great Universities in Germany and England, and practically (minus the responsibility) in the Calcutta University. If you can propose a more satisfactory plan, we shall be glad to consider it. If not, we feel confident our plan is better than the somewhat haphazard, variable method of electing the examiners which obtains at present.

Lastly, your dicta about cram surprises us. You admit it is a great evil, but shake your head in despair, and say that nothing can be done to miti-

gate the harm it is inflicting on sound scholarship and learning. Cram is not synonymous with preparation for examinations. Our students unfortunately too often believe that success in the University Examinations depends upon the exercise of memory and not of thought. Do you think the mass of the students attend our Colleges to learn to think and observe for themselves, and acquire rational useful knowledge? Ask any experienced educational authority, and you will almost certainly find his opinion is practically identical with our own. Students attend primarily to qualify for the examination, and they attend to lectures so long as the Professor directly keeps to the text-book and gives explanations or summaries when they take notes to be carefully learnt afterwards. But if the Professor endeavours to awaken their interest in the subject itself, or to raise them to independent thought, or to the apprehension of a great principle, he finds that the great majority passively refuse to follow. The fault, we maintain, is not so much with the students as the system itself.

Again when the examination approaches they read and re-read their notes and abstracts, and sometimes their text books. They use every effort to obtain the notes of any professor who may be an examiner in the subject he lectures in (and quite right too considering the character of the examination.) They sit up late at nights before and in many cases during the examination. They come to the examination with their notes and books in their hands, and read up to the very last moment. They gorge their memories up to the very last, and then find when the time of answering the questions arrives, that neither memory nor brain will respond quickly because the one is fagged out and the other has been neglected. One of the most painful experiences of a Professor in Calcutta is undoubtedly when he sees an intelligent student preparing himself in this manner until he injures his health. Such a student too frequently goes into the examination with a throbbing head and feverish hands, and either fails entirely in the examination, or at the best takes a very inferior position to what his abilities and his willingness and power of work seemed to entitle him. We have seen this in our experience over and over again. We have warned students against it, but the pressure of the system is too strong. The ill health of students to which you refer is not due to the amount of brain work and thought that the course demands, but to the pernicious influence of the examinations. It is neither the student, nor even that "*bete noir*" the Education Department that is mainly in fault, it is

the Calcutta University itself that it is the head and front of the offending.

You say you do not understand what is meant by teaching by lectures in the higher classes. You have been informed, you tell us, by some B. A's "that the Professors of Mental Science usually read out abstracts prepared by them of the text books and desire the pupils to take notes thereof, and similarly the Professors in other subjects. You apparently approve of this method of education, and say it differs from that of school masters in the ordinary school. Probably it does, but is it the better for that distinction? This in our opinion is not lecturing, it is cramming (grinding as it is technically and aptly called in England) for an examination, but it is not education. It is impossible in a brief space to describe what we mean by lecturing to the higher classes, especially as the methods will depend largely upon the character of the subject and the ability and idiosyncrasy of the lecturer. We would only refer you to the lectures of Faraday, Tyndall, Ruskin, the lecturers in history at the English Universities, or even Sir William Hamilton himself to see that the field, the scope, the aims of lecturing are not in the opinion of some able men quite identical with those of your model Professor of Mental Science, who reads out abstracts as a kind of dictation lesson to his pupils.

There are several other points in which we disagree entirely with you, and others in which we concur fully, as for example, the desirability of a fixed standard for examination, and the limitation of the number of examining bodies so as to secure as far as possible, public esteem, and the highest credit for the degrees conferred by the University. But we have far overstepped the limits we proposed when we began the consideration of your criticism. If our remarks taken in conjunction with your criticisms enable the public in Bengal to consider the question more fully and carefully and impartially than they would otherwise have done our thanks will be due to you for your searching criticism and the gain will belong to your country, and especially to that part of it in whom we are heartily interested viz., the students of Physical Science in the higher branches.

We remain,
Yours very sincerely,
JOHN ELIOT,
ALEXANDER PEDLER.

To

DR. RAJENDRALALA MITRA L.L.D. C.I.E. ETC.

University of Madras.

Report of the Committee of Syndicate appointed to inquire into the results of the Matriculation Examination of 1900-01 in comparison with the results of previous examinations.

We have considered the papers of questions set at the various Matriculation Examinations since 1893 and have carefully compared the results arrived at by the examiners in the years from 1897-98 onward. We have had a number of statements drawn up which cast light on the results of examination in those years, especially in the year 1900-01. These statements we append to the present report. Our conclusions and recommendations are as follows :—

1. We consider that the questions set in Physics and Chemistry have all along been more minute and detailed than the University intends to be set to candidates who are supposed to have been trained simply to observe and understand natural phenomena, but not as yet to have received anything like a full education in natural science.

2. We consider that the unsatisfactory results (especially of the examinations of recent years) which appear in Appendix A are partly owing to undue difficulty in the papers set in English, Physics and Chemistry, and History and Geography. It appears to us that the examiners in those subjects have sometimes been too much afraid of setting questions set in previous years and that they tend, when such questions are set at all, to twist them into forms which it is difficult for candidates to understand. The examiners seem to us not to bear sufficiently in mind that although some of the candidates in any given year may have been candidates on one or two previous occasions, they have to deal with an entirely new set of candidates after a very few years have elapsed.

3. We consider it highly probable that the unfavourable character of the results is to be ascribed to some extent to undue severity of marking. We are aware that the assignment of marks to the answer-papers of candidates is almost entirely in the hands of assistant-examiners, most of whom are comparatively inexperienced. It is well known that inexperienced examiners nearly always err on the side of severity in marking.

4. We consider it a most unsatisfactory feature of recent examinations that the standard should vary so much from year to year as Appendix B shows that it does in nearly all branches. No doubt the quality of the candidates varies from year to year, but certainly not to anything approaching to the degree in which the percentages of failure vary. The difference in the quality of the candidates may, perhaps, explain the 3·2 p. c. of difference in the number of failures in the Second Language between the year in which the percentage of failure in that branch is highest and the year in which it is lowest. But the corresponding difference, as shown in Appendix B, is 12·4 p. c. in Mathematics, 19·7 p. c. in English, 24·9 p. c. in History and Geography, and 32·3 p. c. in Physics and Chemistry. This seems to us to be enough to prove that the standard has been very much higher in some years than in others, whether this has been due to greater difficulty of questions or to greater severity of marking, or (as is most probable) to both causes.

This same feature, of a most unsatisfactory change of standard, appears (especially as regards History and Geography, and Physics and Chemistry) from the figures contained in Appendix C. That appendix shows the number and the percentage of those who in the last four years have obtained less than a quarter of the marks in each division of the

examination, and have thus shown their entire unfitness in at least one branch of study. In English the difference between the percentage of total failures in the year when that percentage was highest and the year when it was lowest is 6.1. The corresponding difference in Mathematics is 8.5 p. c., in History and Geography 9.5 p. c., and in Physics and Chemistry 15.4 p. c. Or, to put the most outstanding facts contained in Appendix C in another form, the number declared to be hopelessly unfit in Physics and Chemistry was much more than twice as great in 1899-00 as in 1897-98, and the number declared to be hopelessly unfit in History and Geography was much more than twice as great in 1900-01 as in 1898-99. When the standard has varied so enormously it is impossible to hold that examinations have been satisfactory.

5. We consider that the chief defect of the last examination, as well as of other recent examinations, is that, whether through the questions being too difficult or through the marking being too severe, or most probably from both causes combined, by-law 135 seems practically to have fallen into disuse. That by-law provides that "the questions in each subject shall not be more in respect of number or of difficulty than can be answered, within the allowed time, by a candidate of decided ability well-prepared in the subject." It appears to us that if this by-law were as fully borne in mind as it ought to be, the results at the last examination would, in a rough way, have been somewhat like the following. There were about 7,300 candidates. Of these, as is shown in Appendix C, somewhere about 1,300 may be set aside as having been quite unfit to appear for examination in some one or other of the subjects. Of the remaining 6,000, who were tolerably presentable candidates, 1 per cent. or 60, might fairly be expected to obtain four-fifths, and at least 2 p. c. more, or 180 in all, to obtain about two-thirds of the marks assigned in the various branches. But Appendix D shows that in English there are *none* where we should look for 60 and only 35 where we should expect 180. Similarly in Physics and Chemistry instead of 60 there are *none* who obtain four-fifths of the marks, and instead of 180 only 9 obtain 55 marks, *i.e.*, about two-thirds of the total. Again in History and Geography instead of 60 there are *none* who obtain four-fifths of the marks and instead of 180 only 4 obtain 55 marks, that is about two-thirds of the total. In Mathematics the results come nearer to what we deem it reasonable to expect, for 17 obtain four-fifths of the marks and 134 obtain two-thirds. It will be further seen from Appendix D, that in History and Geography only 10 p. c. of the tolerably fit candidates and less than 7 p. c. in Physics and Chemistry get even half the marks.

An important result of the practical neglect of by-law 135 appears in Appendix E. That appendix shows the number of candidates and the proportion of the 6,000 not totally and obviously unqualified who stand within a very few marks either above or below the figure which enables candidates to pass. It appears that of the 6,000 who were more or less fit to appear at the examination 22.5 p. c. in English, 24.8 p. c. in Mathematics, 44 p. c. in Physics and Chemistry, and 45 p. c. in History and Geography are placed just on the margin between success and failure. To this fact Dr. Wilson in his report, as chairman of the Physics and Chemistry board, makes special reference. It appears from Appendix E that what Dr. Wilson says in reference to his own subject applies largely to the results in English and Mathematics, and to the results in History and Geography even more markedly than to those in Physics and Chemistry. Dr. Wilson points out in the same report that the marks assigned to individual candidates are by no means always, and perhaps not even usually, the direct results of examination of their answer-papers. Allowance, as he says, has to be made for the personal equation. One examiner cannot possibly examine the 7,000 papers, or thereabout, in his own subject. The answer-papers have to be divided between some eight or ten examiners. Of necessity some of these examiners mark more leniently than others. Dr. Wilson says that cases have been known (though it may be hoped that they are extreme and rare) in which the results arrived at by different examiners, dealing with sets of candidates presumably of equal merit, have varied by as much as 100 per cent. ! But when some 1,500, and still more

when nearly 3,000, candidates are just a very few marks above or a very few marks below the line that divides passing from failure, a very small degree of greater lenity or greater severity in marking may determine whether many hundreds of them shall pass on the one hand or fail on the other. It has been usual, and is indeed unavoidable if there is to be any approximation to fairness, to increase the marks of one examiner and lower those of another by a greater or less percentage. Consequently it comes about that little importance can be attached to the precise marks which stand opposite the name of each particular candidate in the register of tabulation which is submitted to the Syndicate. Thus when the total value of the papers in any one branch is 80—still more when it is 150—it is pretty much an accident whether the marks assigned to any particular candidate are 3 or 4 above or 3 or 4 below those of another. In the case of candidates who get decidedly good or decidedly bad marks, this matters very little. When a candidate gets 60 marks out of 80, it is unimportant that the value of his papers if they were accurately valued should be—let us say—64. In either case he passes. Similarly it is unimportant that the precise value of papers which have 12 marks assigned to them should be 16. In either case the candidate fails. But if the passing mark be—let us say—28, it is highly important that a candidate who deserves 30 marks should get only 27 or that one who deserves only 25 should get 28. In the one case a candidate who ought to pass fails. In the other case one who ought to fail passes. When the papers are so set or so valued that in some subjects about half of all those who ought to appear for the examination are just above or just below the dividing line, the value of the examination must very largely depend on adequate allowance being made for the uncertainty and want of precision inseparable from the fact that the answer-papers have to be entrusted to many examiners, who naturally value according to different standards.

In order to bring this aspect of the case to some kind of rough practical test, we have had the paper drawn up which appears as Appendix F. It shows the number and percentage of candidates at each station who failed at the recent examination by 4 marks or less *in one subject only*, but whose total marks were satisfactory. When account is taken of the uncertainty caused by different standards of marking and by the calculations intended to minimise that difference, we consider it not unlikely that a candidate who gets 4 marks below the *minimum* may have answered quite as well as one who is credited with the *minimum*. We further consider that a candidate who gets a good total but fails by a mark or two in one subject is better qualified to enter on a course of liberal education than one who gets the exact *minimum* in all subjects.

The general result of the figures in Appendix F is that while only 1,422 of the 7,312 examinees were declared to have passed, there were 644 others who (reckoning simply by the tabulated results) were as fit to pass as many, and probably as most, of those pronounced successful. In other words, if full allowance were made for the inaccuracies and uncertainties of the examination, the percentage passed might have been 28·5 and not 19·4.

Again several cases have been brought to our notice of students who passed by a few marks at the examination of 1899-90 who are certified by competent authority to have worked diligently throughout the following year and yet failed by a few marks in 1900-01 in the subject in which they had passed the year before. We believe that if they were searched for, many hundreds of such cases might be discovered.

It seems probable that the number of those who may be held to have deserved to pass might be much increased if we counted those who failed (it may be only through the uncertainty arising from modification of marks) by one or two marks in more than a single subject. Thus we have seen a paper drawn up by a Fellow of the University, himself an examiner, according to which no fewer than 807 of those declared to have failed at the late examination obtained 40 p. c. or upwards of the total marks, *i.e.*, considerably more than the sum of the *minima* required in the various branches. We do not feel called on,

however, to enter further into minute details or to particularize the candidates who seem to us to have been hardly dealt with. All that we desire is to give some rough indications of the unsatisfactory character of the late examination. We are aware that results cannot be interfered with after they have been passed and published. It is only with a view to the improvement of future examinations that we bring such facts as the above to the notice of the Syndicate.

6. We consider that the general conclusion to which our varied inquiries point is that examinations conducted as those of 1900-01, and some other years, have been are not such as the University either desires, or ought to desire. They secure indeed the passing of candidates whose abilities are decidedly superior and the failure of those who are decidedly unqualified. To this extent the examinations are satisfactory. But they leave it far too much a matter of mere chance whether candidates of fair average ability pass or fail. When papers are so set or answers are so valued that diligent students of ordinary ability succeed or fail by just a mark or two, and when rigid accuracy of marking can hardly be secured, all encouragement is taken away from those fair average students who are the majority at all examinations and for whose well-being it seems to us that the University should particularly care. There is no great hardship in a fairly qualified candidate failing in one examination if there is ground to believe that a year of steady work will make him certain to pass at the next. But if the examinations are so conducted that nothing except ability decidedly above the average can be relied on to secure success—if they are so conducted that no diligence will bring a candidate of ordinary ability further than just a little above, or it may be just a little below, the passing mark, the general result is bound to be disastrous.

7. We recommend that, with a view to the improvement of future examinations, the Syndicate should, after mature consideration, formulate some plan by which the present uncertainty of the results should be diminished and special attention be given to candidates whose answers are a little above or a little below the *minimum* in some subject or subjects, but whose general marks are good. There is the plan, for instance, which was already been recommended to the Syndicate by the Committee of Senate, *viz.*, that the chairmen of the various boards of examiners should form a Committee to consider the marks as a whole before they are submitted. Or a special board of moderators might be appointed. Or the Syndicate might be empowered, either as a body or through a Committee, to act as a moderating board. Or the Syndicate might appoint that chief examiners should re-value the papers of candidates to whom assistant-examiners may assign marks either a little above or a little below the *minimum*. Or the Senate might be asked to sanction a scheme of marking by which marks in separate subjects might count for less, and a good total for more, than at present. We recommend that the Syndicate carefully consider these plans, and any similar plan that may be suggested, for securing fairer and more satisfactory results than those of the last examination, especially in the case of students who appear from their marks to be intelligent and steady without any pretence to brilliance.

8. Our chief recommendation is that the Syndicate should call the attention of all the boards of examiners to by-law 135 informing them that, in its opinion, this important by-law has come to be practically neglected and that it is essential that it should henceforward be carefully and strictly observed. We recommend that the examiners be informed that no examination can be held to suit the present state of education, or to be in any sense satisfactory, unless the question-papers are so set and the answer-papers so marked that a few of the best candidates get nearly full marks and that a fair proportion of them get marks far above the *minimum* required for merely passing.

16th March, 1901.

WILLIAM MILLER.

E. MARSDEN.

C. SANKARA NAIR.

APPENDIX A.

PERCENTAGE PASSED IN

1880—81 = 39
81—82 = 30·4
82—83 = 35·2
83—84 = 32·8
84—85 = 30·7
85—86 = 32·6
86—87 = 33·9
87—88 = 29·8
88—89 = 25·3
89—90 = 22·6
90—91 = 23·5

PERCENTAGE PASSED IN

1891—92 = 30·1
92—93 = 15·4*
93—94 = 22·8
94—95 = 22·1
95—96 = 36·6
96—97 = 30·8
97—98 = 27·4
98—99 = 32·0
99—1900 = 21·0
1900—01 = 19·4

* The smallness of the percentage in this year and to some extent in the succeeding years may be explained by changes in the University arrangements.

APPENDIX B.

PERCENTAGE FAILED—

	in English.	in English only.
1897—98	60·1	18·1
98—99	53·3	22·2
99—1900	40·4	4·4
1900—01	53·2	6·2
	in Second Language.	in Second Language only.
1897—98	16·1	·6
98—99	17·9	1·3
99—1900	15·9	·6
1900—01	19·1	·5
	in Mathematics.	in Mathematics only.
1897—98	40·2	4·2
98—99	31·4	6·3
99—1900	39·3	3·9
1900—01	43·8	2·9
	in Physics and Chemistry.	in Physics and Chemistry only.
1897—98	28·6	·9
98—99*	...	...
99—1900	60·9	14
1900—01	56·9	7·7
	in History and Geography.	in History and Geography only.
1897—98	30·4	1·7
98—99	19·2	1·2
99—1900	33·3	3·2
1900—01	44·1	3·1

* In this year only those who passed in all the other subjects were examined in Physics and Chemistry.

APPENDIX C.

Statement showing (a) number of candidates, and (b) percentage of candidates who got less than 25 per cent. of the marks in,

		(a)	(b)
English	... 1897—98	977	17·7
	98—99	989	16·6
	99—1900	753	11·6
	1900—01	931	12·7
Second Language	... 1897—98	211	3·8
	98—99	271	4·5
	99—1900	254	3·9
	1900—01	310	4·2
Mathematics	... 1897—98	1,101	19·9
	98—99	731	12·3
	99—1900	1,189	18·3
	1900—01	1,519	20·8
Physics and Chemistry	... 1897—98	725	13·2
	98—99*	...	...
	99—1900	1,860	28·6
	1900—01	1,757	24·0
History and Geography	... 1897—98	706	12·8
	98—99	390	6·5
	99—1900	677	10·4
	1900—01	1,172	16·0

* In this year only those who passed in all the other subjects were examined in Physics and Chemistry.

APPENDIX D

EXAMINATION OF 1900-01.

Candidates who got 120 or more in English (total = 150)	...	...	0
Do. do. 100 do. do.	...	...	35
Do. do. 75 do. do.	...	...	1,009
Do. do. 96 do. Mathematics (total = 120)	...	...	17
Do. do. 80 do. do.	...	...	134
Do. do. 60 do. do.	...	...	967
Do. do. 64 do. Physics and Chemistry (total = 80)	...	...	0
Do. do. 55 do. do.	...	...	9
Do. do. 40 do. do.	...	...	399
Do. do. 64 do. History and Geography (total = 80)	...	...	0
Do. do. 55 do. do.	...	...	4
Do. do. 40 do. do.	...	...	610

APPENDIX E.

EXAMINATION OF 1900-01.

			Proportion to the 6,000 not hopelessly unfit.
Candidates who got 56—64 in English (passing marks = 60)	...	1,352	22.5 p.c.
Do. 38—46 in Mathematics (passing marks = 42)	...	1,488	24.8 „
Do. 24—32 in Physics and Chemistry (passing marks = 28)	...	2,645	44.0 „
Do. 24—32 in History and Geography (passing marks = 28)	...	2,708	45.0 „

APPENDIX F.

EXAMINATION OF 1900-01.

Statement showing in regard to all stations, (a) the number examined, (b) the number passed, (c) the number who have failed by four marks or less in *one subject only* and have gained totals showing that they are fit to enter on a course of liberal study, (d) the percentage passed, (e) the percentage which, according to the tabulated results, may be considered fit to pass.

STATIONS.	(a)	(b)	(c)	(d)	(e)
Madras	1,191	244	79	20.5	27.1
Anantapur	31	4	4	12.9	25.8
Aurungabad	12	4	1	33.3	41.7
Bangalore	301	74	22	24.6	31.9
Bellary	101	21	3	20.8	23.8
Berhampore	59	11	9	18.6	33.9
Calicut	113	28	10	23.7	32.2
Chicacole	33	11	8	28.9	50.0
Cocanada	102	21	9	20.6	29.4
Coimbatore	269	39	18	14.5	21.2
Cuddalore	211	24	15	11.4	18.5
Cuddapah	34	7	2	20.6	26.5
Ernakulam	172	46	21	26.7	38.9
Guntur	124	23	13	18.5	29.0
Hassan	61	11	6	18.0	27.9
Hyderabad	119	12	8	10.0	16.8
Kottayam	212	35	23	16.5	27.4
Kumbakonam	285	82	33	28.8	40.4
Kurnool	25	6	1	24.0	28.0
Madura	337	64	41	18.9	31.2
Mangalore	196	58	22	29.6	40.8
Masulipatam	112	15	9	13.4	21.4
Mercara	27	5	2	18.5	25.9
Mysore	96	23	12	23.9	36.5
Nazareth	34	5	3	14.7	23.5
Negapatam	57	15	5	26.3	35.0
Nellore	136	20	16	14.7	26.5
Ongole	27	7	3	25.9	37.0
Palghat	374	51	16	13.6	17.9
Pudukota	77	18	10	23.4	36.4
Rajahmundry	200	31	9	15.5	20.0
Salem	115	19	11	16.5	26.0
Shimoga	80	20	13	25.0	41.3
Tanjore	362	51	38	14.0	24.6
Tellicherry	91	15	4	16.5	20.9
Tinnevely	316	59	33	18.7	29.1
Trichinopoly	377	77	35	20.4	29.7
Trivandrum	337	68	39	20.2	31.8
Tuticorin	30	4	7	13.3	36.7
Vellore	198	33	15	16.7	24.2
Vizagapatam	129	28	17	21.7	34.9
Vizianagaram	139	33	19	23.7	37.4
	7,312	1,422	664	19.4	28.5



सत्यमेव जयते

THE EYESIGHT OF INDIAN SCHOOLBOYS.*

By S. V. RAMASWAMY IYENGAR, M.B., L.R.C.P. & S.,

Government Oculist, Bangalore.

SUBSEQUENT to the order given to me by Government in April 1900 to inspect the Central College and report to them my impressions as to the effects of the mental work on the health of the eyes of the pupils attending it, I have visited eighteen other schools and colleges in different parts of India, seeking types of nationalities differing from one another in mental calibre and physical constitution, and made the investigations which I now embody in a report, and beg leave to submit to the Government through you the results of my observations. These observations mostly having been made during my privilege leave, have been necessarily fragmentary and limited in extent, but they have still been sufficient to bear in upon my own mind some definite conclusions, and they will, I trust, be thought by you to possess some general value and significance, and to justify perhaps a further and more complete investigations of the questions to which they refer. The general results of my observation on the schools which I have visited is to confirm the opinions which I ventured to state in my report on the Central College to the effect that a hot-house system of education does exist, that it is exerting appreciable evil effects on the advanced students in the College Department, and that if unchecked it is likely to entail very serious consequences on future generations. It would be impossible to deny that the manner in which the eyes are used during youth and adolescence may exert a definite influence upon their development and their functional activity; or to deny that this influence when exerted upon those who will afterwards become parents may entail consequent modification of structure upon off-spring.

2. When we consider that this vast army of students is composed of those to whom the destiny of the nation may be sometimes committed, it is obviously important that great care should be exercised to avoid physical degeneracy of eyesight during the years of school-life, which are also the years of physical growth. It is plainly important, therefore, that due regard should be paid to the hygienic environments of the children, and that the work of the schools should be so regulated that it shall rest lightly as possible upon the growing child.

Table.—Influence of Study.†

25 Indian Schools examined.	BELOW HIGH SCHOOL CLASSES.		HIGH SCHOOL CLASSES.		COLLEGE CLASSES.	
	Total examined.	Percentage of abnormal vision.	Total examined.	Percentage of abnormal vision.	Total examined.	Percentage of abnormal vision.
	1,667	40 p. c.	1,415	54 p. c.	1,261	55 p. c.
No study	306	18 p. c.	...	...	...	...

† Table reduced from detailed table in Report.—Ed., I.M.G.

3. The table worked out, herein appended, speaks for itself. In it one will see that there is abundant and convincing evidence that the vision of children is constantly deteriorating during the school period. The truth is, the eye is unequal to the task which is too often expected of it. The use of vision for near objects is becoming constant, and that for distant, occasional.

* Being a report to the Sanitary Commissioner, Mysore.

4. It is to myopia that most of my remarks apply. Myopia or short sight is rarely congenital; it is sometimes present in early life, but it usually makes its appearance about the eighth year; it is greatly due to work at near-points during school-life. It is the more serious condition as far as vision is concerned. From the various histories I have heard from students there is, in my opinion, no doubt that during school-life eyes which previously gave no indication of such a condition have become near-sighted, and in others the degree of myopia has become aggravated. The long continuance of close work with imperfect light, a stooping posture, within several cases, brain and body fatigued are among the causes which lead to this end. I also found that myopia increased steadily both in numerical prevalence and in degree as school-life was prolonged, being least frequent and least pronounced in the elementary classes, more frequent and more pronounced in the high school classes, and most frequent and most pronounced in the college classes. Myopia as met with in schools has been styled "School-Myopia."

The majority of schools affiliated as they are to the present system of examining universities are over-working the pupils. Besides the five or six hours of nearly continuous work in school, extra hours are spent at home in preparation of home-work and school-work; add to this test examinations, quarterly, half-yearly and yearly and University examinations; over and above these facts you have ambition and the struggle for existence. When all these factors are put together, it is no wonder that pupils "burn the midnight oil." It is indisputable that evening work by artificial light is peculiarly detrimental to vision and conducive to that shortsightedness which is increasing amongst us so rapidly. Since it is well known that daylight is far superior to artificial light, I would advise that all study that can be done by boys in daylight should be accomplished then and not put off till day has gone. No artificial lighting can make up for daylight. An unsteady light is dazzling and fatiguing, nor should the light be placed too near the eye because the heat emitted is injurious and occasions discomfort. The light should be sufficient and not dazzling, as is generally the case with poor cheap lamps with a reflector at the back.

5. Over-work during the period of nervous development is especially hurtful. The eyes cannot with impunity bear the long continued strain to which they have so frequently to submit. This remark, I believe, applies to all nationalities—be they Hindus, Parsees, or Anglo-Indians—be they boys or girls—be they poor or rich—be they literate or otherwise. From experience and an examination of eyes that have included Mysorians, Tamilians, Bengalees, Punjabees, Sikhs, Guzarathees, Parsees, Mussulmans, Eurasians and Europeans, I have come to the conclusion that the percentage of abnormal vision increases with advancing years and study and with the lengthening hours of study. If any set of pupils enjoys better vision it is partly due to better arranged time, table of study and recreation. The intervals of rest in the hours of study, even if short, should be frequent. The M. A. O. College at Aligarh and the Mayo College at Ajmere are peculiarly fortunate in this respect. In these two places especially I am glad to say, work is not made heavy.

6. Since some of the factors that naturally tend to deteriorate the eyes of pupils exist, and since they cannot all be done away with, the authorities who have the welfare of pupils at heart should encourage steady, methodical work and fairly diffused throughout the day, month and year. If such work is superintended by kindly and judicious teachers, it can be done with perfect ease by any youth in ordinary health who has a liking for study and for intellectual pursuits.

7. In this connection I must say a word or two about school-rooms and light. An ideal school like what the Americans possess in their large cities may be difficult to find in our cities. Even in the capital of India and in Bangalore, I know there are schools, which are quite unfit for such a purpose. The rooms were so dark, dingy and cold that I had to conduct my examinations at or near the entrance on the verandah. When I entered some of the rooms they were so dark that it took me some seconds before I could recognise faces. Very few of the rooms in them had light falling on the desks and benches from the left side, and in many of them there were cross-shadows. From the standpoint of the

ophthalmologist the ideal school-room is lighted only from the left side or the left and the rear of the pupils. In every properly constructed school-house lighting from opposite sides should be avoided under all ordinary circumstances, since it occasions cross-lights and perverse shadows. The uncouth and irregular postures of the pupils in the classes are occasioned in large part by the struggle to avoid the shadow of the hand, which falls directly at the point of observation. The uncouth postures assumed by boys should be rectified, since constant stooping forward of the head as is generally the case with tired out boys is the most effective factor in the increase of myopia. The extra hours occupied at home in preparation of school-work should be dispensed with, at least in the case of children who are below ten. Parents should see that their children are provided with good lamps, that these are placed at a comfortable distance on the left side, and that they do not go on studying more than two or three hours at a stretch at the most, that the work be it at books, needle, drawing or piano is done in good sufficient light.

8. In conclusion I beg to acknowledge that I am greatly indebted for courtesies extended to me by the Principals, Head Masters and Head Mistresses of schools and colleges I visited. All of them have aided me in securing data for this report.





सत्यमेव जयते

[The Syndicate have made considerable alterations in, and additions to, last year's Instructions.]

No. OF 1901-1902.

OFFICE OF THE UNIVERSITY REGISTRAR,
Bombay, 1901.

To

Examiner in _____

at the _____ Examination which begins on the _____
_____ember 1901.

SIR,

I have the honour, by direction of the Syndicate, to draw your attention to the following instructions :—

1. When two or more Examiners are appointed in one subject, they are jointly responsible for the whole examination in such subject and therefore the question-papers should be drawn up by the Examiners acting together, and the questions should be finally settled at a meeting attended by all the Examiners in that subject.* It is desirable that the communications in this matter should be made, so far as possible, only at meetings held for the purpose, and I am to say that the meetings for consultation must be held in the upper Hall of the University Library, unless all the Examiners in any subject agree to meet elsewhere. In cases where communication by letter cannot be avoided, Examiners must be careful to seal any packet containing draft questions, using a seal which can be identified, and to register the packet if it is sent by means of the Post Office.

2. In drawing up the papers, Examiners are requested to bear in mind that they ought to contain questions embracing all the prescribed subjects (*see* University Calendar for 1901-1902, pp. — †) and that the candidates have a limited time—three hours ‡—allowed to them to answer the questions set. The Syndicate trust that great care will be taken to ensure that the questions set are not more numerous or more difficult than a well-prepared candidate could answer fully in the appointed time.

3. Examiners are requested to bear in mind that there should be no violent change of standard in the question-papers.

4. Candidates should not be asked to divide their answers to a paper into more than two, or at most, three sections.

* Joint Examiners will be supplied with forms, to be signed by them, of certificates to the effect that the papers have been so settled. The Registrar has instructions to report any infringement of this rule and to refuse any question-papers with which the certificate is wanting.

† With respect to the Paper in Botany, at the First Examination in Medicine, the Syndicate desire that questions in systematic Botany be carefully restricted to the Natural Orders mentioned on page 74 of the University Calendar for 1900-1901.

With regard to the papers in English at the University School Final and Matriculation Examinations, the Syndicate desire that the vernacular passages to be set for translation into English as alternative to paraphrase should be translations by the Examiners in the respective vernaculars at the respective examinations of a passage of simple narrative English prose to be selected by the English Examiners. In each of the two examinations—University School Final and Matriculation—the English Examiners will select a passage of simple narrative English prose and the same passage will be sent to all the vernacular Examiners in the same examination.

‡ Three hours are allowed for all papers except for papers in Practical Geometry, Linear Perspective and Free-hand Drawing at the University School Final Examination, for all of which only two hours are allowed. In Manual Training at the School Final three hours are allowed for Free-hand and Model Drawing together,

5. The questions and answers in the Second Language, to the extent of at least half the total number of marks, must be given and exacted in the English language.

6. Examiners are strictly enjoined to deliver the question-papers personally to the University Registrar at this office between the hours and on the days to be hereafter notified. The Registrar has instructions to refuse or to return question-papers tendered or delivered in any other manner. Each question-paper, or each copy of it when more than one are to be delivered, should be enclosed in a sealed cover and the cover should have the subject and the number of the paper (if there are more papers than one to be set in the subject) and the Examination at which it is to be set written on it.

Delivery of the Question-papers. N.B.—The Examiners at the Matriculation and School Final Examinations will have to supply six copies of each of the papers as they are called for, the first copy being required not earlier than the Friday before the one immediately preceding the day on which the Examination commences.

7. Due notice will be given of the time in each case at which proofs will be ready for inspection and correction by Examiners; and the Examiner, or one of the Examiners, when more than one are appointed in one subject, is required to call at the Government Central Press at the hour at which the proof will be ready for the purpose of reading it over.

8. I am to draw the very special attention of Examiners to the consideration that, as under the arrangements sanctioned it will not be possible to issue proofs, or to submit proofs, for the inspection of Examiners at the printing office until within an hour of the time when the papers are to be set, it is most desirable that the question-papers set should be written out very carefully and in a perfectly legible hand. The marks assigned to each question must also be entered on the MS.* and Examiners should write only on one side of the paper.

9. Each Paper Examination shall be under the personal supervision of one of the Examiners responsible for each paper set. When the examination is held in more than one building, one Examiner must be present in each building. When on this account or on account of the number of candidates the presence of more than one Examiner is necessary, the Registrar will inform the Examiners accordingly. Supervisors may be appointed to assist the Examiners, but the Syndicate desire to call the particular attention of Examiners to the rule which makes the presence of one Examiner during the whole period of Examination indispensable.

10. Except in the Matriculation and School Final English papers, Joint Examiners in a subject or group of subjects should so divide their work that the answers of some Candidates to a part or the whole of any paper should not be examined by one of them, while the answers of the remaining Candidates to the same paper or part of a paper are examined by another Examiner. In the case of the Matriculation and School Final English papers, the Examiners should, before they begin to assign marks, meet and jointly look over a certain number of papers in conjunction with the Moderators so as to secure uniformity of standard.

N.B.—Examiners in the Matriculation and University School Final Examinations, in subjects other than compulsory English, are to note that they are to examine the papers of those Candidates only whose papers they will be asked from day to day to examine.

11. † The Oral, Practical, or Clinical Examinations, whenever these are prescribed, shall take place after the Paper Examinations are concluded. In all cases in which an Oral Examination is prescribed, such Examination is to be held in the Examination Hall only. The Syndicate direct the Examiners (a) to examine the papers of each Candidate, as far as possible, before calling him up for his Oral Examination.

* In the case of the M.A. papers, marks need not be assigned to each question.

† Examiners in Anatomy and Physiology are requested to report to the Syndicate the names of the assistants they may appoint to assist them in the Practical Examination.

tion, (b) to arrange for as short a detention of the Candidates at the place of Examination as possible, and (c) so far as practicable, to examine first the Candidates who come from out-stations, commencing with those who have come from the places furthest from the Examination centre. At the examination not more than twenty (20) Candidates shall be examined orally in one day. When more Examiners than one are appointed in one subject, two must be present at the Oral, Practical, or Clinical Examinations of each Candidate.

12. The Syndicate having decided that the system of giving grace marks should be done away with, Examiners who are colleagues in groups or in individual subjects are to meet and jointly consider, before finally sending their marks to the Registrar, whether, in particular cases, Candidates should or should not pass in their subjects, as the final decision will now rest with them. In the case of Candidates whom the Examiners in a particular subject may consider fit to pass in that subject, only if he has done well in the others, such Examiners are at liberty to obtain information, as far as possible, from the other Examiners or from the Office.

13. * The answers of the Candidates, and the lists containing marks assigned to each Candidate for each question attempted, together with the totals for each Paper, entered in ink, which must contain no fractional marks, filled in and signed by the Examiners, must be forwarded so as to reach the University Registrar on or before the days to be hereafter notified. In the case of subjects in which more papers than one are set by the same Examiner or group of Examiners, or in which there is an oral examination, one of the lists should also show the number of marks gained by each candidate in each paper, and in the oral examination, as well as the total number of marks gained in the whole subject. Each mark list, whenever the paper has been examined by more than one Examiner, as well as the list containing the total number of marks gained in each subject and also the one in which the marks of a group of subjects are totalled together, should be accompanied by a certificate† to the effect that before sending in the particular mark list, not less than half of the Examiners concerned had met together and considered the marks gained by each candidate and that they had the written authority of the rest of their colleagues to so settle the marks finally. The certificates are to be signed by all the Examiners present at such meeting. The Office has instructions to refuse any lists in which these instructions are not carried out.

14. The Syndicate direct that every possible care be taken to prevent the marks given to the Candidates being made known to others than the Examiners.

15. Examiners are particularly desired to avoid all intercourse with Candidates as to the subjects in which they have examined.

16. Examiners shall not make any alteration (save in the case of clerical errors) in their lists of marks when these have once been made over to the Registrar. All corrections of clerical errors must be reported in writing in a letter signed by the Examiner who makes the correction.

17. A meeting of the Examiners, presided over by the Dean of the Faculty, of _____, or, in his absence, the Senior Fellow or Examiner present, will be held in the University Library, on a day to be hereafter notified, to determine the results of the Examination. This meeting, the Syndicate specially desire, should be attended by at least half the number of Examiners, who are colleagues in any subject, and by the sole Examiner in any subject for which only one Examiner is appointed. The Registrar has special instructions to report any evasion of such attendance by Examiners. ¶

18. Suggestions which Examiners may desire to make as to the conduct of Examinations should be submitted through the meeting of Examiners.

* I am directed by the Syndicate to draw the special attention of Examiners to this Regulation with regard to putting in the tabular form provided to them the marks assigned by them to each answer from zero up to the maximum number assigned. When no answer is attempted the entry should be a dash.

† Examiners will be supplied with printed forms for the purpose by the Registrar

19. The Examiners in Bombay will be informed by the University Accountant when the cheques for the amount of their bills are ready, and the Examiners should either call, or send for them with a proper letter of authority, on the day mentioned by the Accountant or as soon thereafter as practicable.

20. The marks allotted to the Papers and to the Oral, Practical or Clinical Examinations are as follows :—

University School Final Examination.

One hundred and fifty (150) marks to the Paper in necessary English, one hundred (100) marks to each paper in the other subjects, fifty (50) marks to each of three papers in drawing, viz., Practical Geometry, Linear Perspective and Free-hand Drawing and fifty (50) marks to Model Drawing; in Manual Training forty (40) marks, to the paper in Practical Geometry (20) and Plan and Projection (20), forty (40) marks each to Free-hand and Model Drawing, and eighty (80) marks to construction of joint in teak.

Matriculation Examination.

One hundred and fifty (150) marks to the English Paper, and one hundred (100) marks to each Paper in the other subjects.

Previous and Intermediate Arts Examinations.

One hundred and fifty (150) marks to the Paper on English text-books, fifty (50) marks to the Paper in English Composition, and one hundred (100) marks to each Paper in the other subjects.

B.A. Examination.

One hundred and fifty (150) marks to the Paper on compulsory English text-books, fifty (50) marks to the Paper in English Composition, one hundred (100) marks to each Paper in the Classical Languages, History and Political Economy, and in (Group *a*) Language and Literature, in (Group *b*) Logic and Moral Philosophy, in (Group *c*) Mathematics, and in (Group *f*) Roman History and General Jurisprudence and Roman Law, eighty (80) marks to each Paper in (Group *d*) Chemistry and Physics, and in (Group *e*) Natural Science, thirty (30) marks to each Oral Examination and forty (40) marks to the Practical Examination in each of the subjects, Chemistry, Physics, Botany and Zoology. At least ten minutes should be devoted to the Oral Examination of each Candidate.

Intermediate Science Examination.

One hundred and fifty (150) marks to the Paper on English text-books, fifty (50) marks to the Paper in English Composition, one hundred (100) marks to each Paper in the other subjects, and fifty (50) marks to each Practical Examination.

B.Sc. Examination.

Seventy-five (75) marks to each Paper in Mathematics, one hundred (100) marks to each Paper in the other subjects, and one hundred (100) marks to each Practical Examination.

M.A. Examination and the Examination for the Sujna Gokulji Zala Vedant Prize.

One hundred (100) marks to each Paper in Languages, History, Philosophy, Mathematics, Physics (*new rules*) and Chemistry (*new rules*), eighty (80) to each Paper in Physics and Chemistry (*old rules*) and Natural Science, sixty (60) marks to the Practical Examination in each of the two subjects, Physics and Chemistry (*old rules*), forty (40) to the Practical Examination in each of the four subjects, Zoology, Botany, Physical Geography and Geology or Animal Physiology, and one hundred (100) to each Practical in Physics (*new rules*) and in Chemistry (*new rules*).

First and Second LL.B. Examinations.

One hundred (100) marks to each Paper.

Honours-in-Law Examination.

One hundred (100) marks to each Paper, or, if the Paper be divided into two Parts, to each part of the Paper.

Examination in Elementary Mechanics of Solids and Fluids.

One hundred (100) marks to the Paper.

First and Second Examinations in Medicine.

One hundred (100) marks to each Paper, and fifty (50) marks to each Practical Examination.

L.M. & S. Examination.

One hundred (100) marks to each Paper, and fifty (50) marks to each Clinical and Practical Examination. In Surgery fifty (50) marks to the Clinical Examination and fifty (50) to the Practical and Operative.

M.D. Examination.

One hundred (100) marks to each Paper, fifty (50) marks to each Clinical Examination, fifty (50) marks also to each Oral Examination, and fifty (50) marks to the Examination in Operative Surgery.

First Examination in Agriculture.

One hundred (100) marks to each Paper, and one hundred and fifty (150) marks to each Practical Examination.

Second Examination in Agriculture.

One hundred (100) marks to each Paper, 300 marks to the Practical Examination in Agriculture, and one hundred and fifty (150) marks to each of the other Practical Examinations.

Examination for the Degree of L.Ag.

One hundred (100) marks to each Paper, three hundred (300) to the Practical Examination in Natural Science, four hundred and fifty (450) to the Practical Examination in Agriculture, and one hundred and fifty (150) to each of the other Practical Examinations.

F.C.E. Examination.

One hundred (100) marks to each Paper, and fifty (50) marks to each Practical.

Second Examination in Civil Engineering.

One hundred (100) marks to each Paper, one hundred (100) marks to the Drawing exhibited, one hundred (100) marks to Drawing to scale a simple building from data (4 hours to be allowed for this last), two hundred (200) marks to Practical Work, and fifty (50) marks to the Practical Examination in Chemistry.

L.C.E. Examination.

One hundred (100) marks to each Paper, seventy-five (75) marks to the Engineering or Architectural Drawing exhibited, one hundred and seventy-five (175) marks to the three other Drawings and Project, one hundred (100) marks to the *viva voce* Examination in Engineering and Project, fifty (50) marks to the Practical Examination in Light, Electricity and Magnetism, and one hundred (100) marks to the Practical Examination in Mechanical Engineering.

21. The following are the Standards for passing the Examinations:—

University School Final Examination.

To pass the Examination the Candidate must obtain one-third of the full marks in each of the necessary subjects, one-fourth of the full marks in each of two optional subjects, and a total of 250. No credit to be given for the third optional subject unless the Candidate shall have passed in that subject.

Matriculation Examination.

To pass the Examination the Candidate must obtain one-third of the full marks in each language, and one-fourth of the full marks in History and Geography, in Natural Science, and in Mathematics (Arithmetic and Algebra, and Euclid).

Previous, Intermediate Arts, B.A., Intermediate Science, and B.Sc. Examinations.

To pass the Examination the Candidate must obtain thirty per cent. (30%) of the full marks in each subject. Should a Candidate, however, not obtain 30 per cent. of the full marks in *one* subject *only*, he should be declared to have passed the Examination, if on a review of the Candidate's marks a majority of not less than two-thirds of the Examiners present decide that the Candidate should pass, provided always that no Candidate shall so pass unless he obtain at least 45 per cent. of the total marks in all subjects. At the B.A., Intermediate Science, and B.Sc., the Candidate must also obtain one-fifth of the full marks obtainable in each Practical Examination. Those of the successful Candidates who obtain 60 per cent. of the total marks obtainable will be placed in the First Class, and those obtaining 45 per cent. in the Second Class.

M.A. Examination.

To pass the Examination the Candidate must (a) obtain one-fourth of the full marks in each *paper* and in each practical examination, and (b) obtain one-third of the total marks obtainable. Those of the successful Candidates who obtain 60 per cent. of the total marks obtainable will be placed in the First Class, and those obtaining 45 per cent. in the Second Class.

First and Second LL.B. Examinations.

To pass the Examination the Candidate must (a) obtain one-third of the full marks in each subject, and (b) obtain one-half of the total marks obtainable. Those of the successful Candidates who obtain two-thirds of the total marks obtainable will be placed in the First Division.

Honours-in-Law Examination.

To pass the Examination the Candidate must (a) obtain one-third of the full marks in each paper or, if the paper be divided into two parts, in each part, and (b) obtain one-half of the total marks obtainable. Those of the successful Candidates who obtain two-thirds of the total marks obtainable will be placed in the First Class.

Examination in Elementary Mechanics of Solids and Fluids.

To pass the Examination the Candidate must obtain one-fourth of the full marks in the subject.

First and Second Examinations in Medicine.

To pass the Examination the Candidate must (a) obtain one-third of the full marks in each subject, and (b) obtain 45 per cent. of the total marks obtainable. Those of the successful Candidates who obtain two-thirds of the total marks obtainable will be placed in the First Class.

L.M. & S. Examination.

To pass the Examination the Candidate must obtain one-half of the full marks in each subject. Those of the successful Candidates who obtain two-thirds of the total marks obtainable will be placed in the First Class.

M.D. Examination.

To pass the Examination Candidates must obtain one-half of the full marks in each subject.

F.Ag., S.Ag. and L.Ag. Examinations.

To pass the Examination the Candidate must (a) obtain one-fourth of the full marks in each *subject*, and (b) obtain 45 per cent. of the total marks obtainable.

able. Those of the successful Candidates who obtain 75 per cent. of the total marks obtainable will be placed in the First Class and those obtaining 60 per cent. in the Second Class.

F.C.E. and S.C.E. Examinations.

To pass the Examination the Candidate must obtain (a) one-fifth of the full marks in the practical examination in Physics and in Chemistry and in the Practical Works in Engineering, (b) one-fourth of the full marks in each *subject*, and (c) one-third of the total marks obtainable. Those of the successful Candidates who obtain 60 per cent. of the total marks obtainable will be placed in the First Class, and those obtaining 45 per cent. in the Second Class.

L.C.E. Examination.

To pass the Examination the Candidate must obtain (a) one-fifth of the full marks in each practical examination, (b) a minimum of 40 per cent. (*i.e.*, 240 marks) in Engineering Papers and *viva voce*, (c) a minimum of 40 per cent. (*i.e.*, 100 marks) in Drawings and Project, (d) one-fourth of the full marks in each of the other subjects, and (e) one-third of the total marks obtainable. Those of the successful Candidates who obtain 60 per cent. of the total marks obtainable will be placed in the First Class, and those obtaining 45 per cent. in the Second Class.

I have the honour to be,
Sir,
Your most obedient Servant,



M.D., B.Sc., C.M.,
University Registrar.



सत्यमेव जयते

No. 200 OF 1902.

EDUCATIONAL DEPARTMENT.

Bombay Castle, 28th January 1902.

From

H. O. QUIN, Esq., I. C. S.,

Secretary to Government.

To

THE DIRECTOR OF PUBLIC INSTRUCTION,

POONA.

SIR,

In paragraph 13 of your Annual Report on Public Instruction for the year 1900-1901, it appears that the Government Law School was even less successful than in the previous year in the 2nd L. L. B. Examination, as out of 268 candidates only 65 passed, against 96 out of 265 in 1899-1900. The Government Law School is the only School in this Presidency which teaches the full Law Course, and I am to request that you will be so good as to inquire into the causes of this unsatisfactory result and submit a report to Government.

I have the honour to be,

Sir,

Your most obedient Servant,

(Sd.) H. O. QUIN,

Secretary to Government.



सत्यमेव जयते

No. 8374 of 1901-1902.

POONA,
OFFICE OF THE
DIRECTOR OF PUBLIC INSTRUCTION.

1st February 1902.

MEMO :

Forwarded to the Principal Government Law School, Bombay, for report and return.

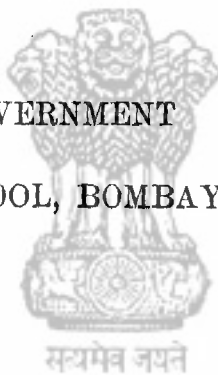
2. The Professors generally should be consulted.

(Sd.) GILES,

Director of Public Instruction.

To

THE PRINCIPAL, GOVERNMENT
LAW SCHOOL, BOMBAY.





सत्यमेव जयते

To

THE DIRECTOR OF PUBLIC INSTRUCTION,

POONA.

Bombay, 11th February 1902.

SIR,

I have the honour to acknowledge receipt of your Memo No. 8374 of 1901-1902 dated the 1st instant forwarding for perusal and return Letter No. 200 of 1902 from H. O. Quin, Esq., Secretary to Government.

I beg to inform you that in conformity with your instructions I called a meeting of the Professors on the 8th instant, when all the Professors were present and we carefully considered and discussed the matter referred to in the communication from Government. The meeting stands adjourned pending receipt of certain information which we have asked the Registrar of the University to furnish to us. On receipt of the information I will call another meeting of my Colleagues and will then submit a Report for your consideration.

I may be permitted to mention that your communication has afforded an opportunity to myself and my Colleagues to submit for your consideration certain suggestions as to the working of the Law School which I had been for some time thinking of submitting to you. I find that all my Colleagues are in accord with me and I hope to be able to send in my report shortly. It will take some little time to obtain the figures we require from the University and I beg that you will be good enough to excuse the delay—unavoidable under the circumstances—in submitting my report.

The letter from Government is returned herewith.

I have the honour to be,

Sir,

Your most obedient Servant,

D. D. DAVAR,

Acting Principal,

Government Law School,

Bombay.



सत्यमेव जयते

TO THE HONOURABLE M. E. GILES,

Director of Public Instruction,

POONA.

1st March 1902.

FROM THE ACTING PRINCIPAL,

GOVERNMENT LAW SCHOOL,

BOMBAY.

SIR,

(1). In continuation of my letter to you of the 11th of February 1902 and in response to your invitation for a Report in connection with the inquiry of the Government of Bombay as to the unsatisfactory result of the Second L. L. B. Examination held by the University of Bombay in the year 1900, I have now the honour to submit to you the following Report :—

(2). For the purposes of easy reference as to what follows I take the liberty to annex hereto a Table giving various authentic figures obtained from the University Registrar's Office and otherwise in connection with the Second L. L. B. Examination for the last four years.

(3). The Government of Bombay in their communication assume that this school "teaches the full Law Course." This is a misapprehension. When in the year 1898 the school was reconstituted as if it were, in terms of the Report of the Committee appointed by the Government of which you Sir, were the Chairman, it was decided to continue the school as an evening school and five Professors including the Principal but excluding the Perry Professor, who lectures solely to the 1st L. L. B. class, were appointed to deliver 30 lectures each in each term to the Students keeping terms for the 2nd L. L. B. Examination. The result is that if the Students attend *all* the lectures of *all* the Professors they get the benefit of 300 lectures in the course of the year—each of such lecture being of one hour's duration. A cursory glance at the number of subjects prescribed by the University and the Books recommended for such examination would convince any one familiar with legal education of the utter hopelessness of educating the Students efficiently in *all* the subjects within the limited time and scope at the disposal of the Principal and Professors of the School.

(4). It is difficult to give specific reasons for the result of the Examination of any particular year but that the results fluctuate considerably will be clear to you from the fact that in the last year's Examination (1901) the result was more than satisfactory 142 Students having passed out of 261 who sent in their applications. Out of the 261 Students who in 1901 sent in their applications 45 were absent. Thus you will see that in the year immediately *following* the year in question 142 Students passed out of 216 who actually submitted themselves for Examination. I venture to think that that is a result with which any Educational Institution would be satisfied more particularly the Government Law School, of Bombay which, as I propose to point out later on,—labours under considerable disadvantages compared to other Institutions in the Presidency.

(5). With reference to the result of the University Examination held in the year 1900 which forms the subject matter of the present inquiry I would point out that out of 268 Students who applied for permission to appear at the Examination 44 did not put in their appearance so that the 65 Students who passed were 65 out of 224 and not out of 268.

(6). In the opinion of my Colleagues and myself the Rules under which a Student is permitted to appear for the 2nd L. L. B. Examination by the Bombay University are extremely lax and require immediate modification. A Student who has "kept four terms" at a College or Institution recognised by the University is entitled *as a matter of right* to appear at the Examination. The only certificate required by the University from the Principal of this Institution is one of attendance merely at a certain number of lectures during four terms. Bare attendance at three-fourths of the number of lectures delivered by each Professor is the only thing necessary to entitle a Student to claim this certificate. I venture to think that there is *no* Educational Institution in this Presidency in which the Principal and Professors have less power or control over its Students as the Bombay Government Law School. My Colleagues and myself are unanimously of opinion that a reform in this Rule of the University is urgently needed. The University we think should insist on a certificate in the same form as the certificate required from Students presenting themselves for the Bachelor of Arts Examination. This would enable the Principal to withhold certificates from such of the Students who in the opinion of himself and his Colleagues have not paid sufficient attention to the lectures delivered in the school during the terms. A very large percentage of Students who go up for the examination are hopelessly unprepared but they nevertheless go up in the hope that by some accident or chance they may get through. My Colleagues and myself are unanimous in the suggestion that each Professor should be allowed to hold a Preliminary Examination in the subjects of his lectures and that all Students

desiring to appear for the University Examination should be compelled in the first instance to submit to such examination and if any one of them fails to satisfy the Professors that he has profited by the lectures and if it should appear to the Professors that he is not in a state of reasonable preparedness the Principal should be empowered to withhold the necessary permission to appear in that year's examination. I have pleasure in stating that all my Colleagues have offered to hold such examination without any extra remuneration and they join with me in impressing upon you and through you upon the University authorities the extreme desirability of bringing about the Reform we have suggested as soon as it may be practicable.

(7.) That the matters referred to in the previous paragraph hereof were present before the minds of the members of your Committee seems clear from para. 13 of their report. The Government of Bombay gave effect to the recommendation of your Committee by placing at the disposal of the Principal and Professors a handsome sum of money to be distributed amongst the Students by way of prizes. I regret to say that that experiment has proved a failure. The Prize Examinations must necessarily be held at the end of the 2nd terms in the year. More than eighty per cent. of the Students of the Government Law School come from the Mofussil—some of them from very distant parts of the Presidency. Their only object appears to be to put in the necessary number of attendances at lectures, just sufficient to keep their term and then they disappear. The Prizes Examinations are not attended by more than about 10 per cent. of the Students and the results—with very few exceptions—have been most disappointing. We think that it would be desirable to continue the giving of prizes for the encouragement of deserving students but we suggest that the Prizes should be given in connection with the Preliminary Test Examinations referred to in the preceding paragraph.

(8). In considering the efficiency or otherwise of the Education imported in the Government Law School and the utility thereof to the Students it is necessary to bear in mind that under the rules at present prevailing a Student can appear for his 2nd L. L. B. Examination any number of years after he has kept his terms in the Law School. A large number of Students who keep their terms for the 2nd L. L. B. course are Students who are really preparing for the 1st L. L. B. Examination at the time they are keeping terms for the 2nd L. L. B. Examination. Their object seems nearly to be to keep terms so as to entitle them to claim their certificate at some future time. The number of Students who go up for their Examination directly after keeping terms is very small comparatively and a large number of Students go up for their Examination 3, 4, 5 or more years after they have served their connection with the Law School. A glance at the table annexed hereto will make this clear. That this matter was also present before the mind of

your Committee in the year 1898 is clear from the 13th paragraph of their report wherein they say—

“Statistics show generally that a large proportion of Students do not ”
“go up for Examination direct from the class and thus the value of”
“lectures to those who do not intend to immediately profit by them ”
“is largely discounted.”

I can only draw attention to this fact which to my mind greatly militates against the utility of the Lectures in the case of a large number of Students and leave it to the authorities to deal with it in any way that may seem desirable to them.

(9). Another very potent factor in bringing about the unsatisfactory result in the Examination held in 1900 is the fact that owing to the prevalence of plague the Syndicate resolved to grant and have granted the first term in each year for the last five years in absentia to the students of the Government Law School. As soon as the concession is made the Students with wonderful unanimity disappear and myself and my Colleagues had to deliver lectures during the best part of the first term in each year for the last five years to almost empty benches. Out of a class of about 200 Students barely a dozen or so attended the lectures during such terms. The result of this concession is that a Student has merely to pay or send in his fee for the term to entitle him to claim that he has kept that term. Under the rules of the University it is not necessary for a Student to keep any particular term, he must keep any four terms. Since the year 1897 a large number of Mofussil Students availed themselves of this concession and having paid their fees for the *first four* terms of the four succeeding years when terms in absentia were granted they claimed their certificates and the Principal was perfectly powerless to withhold such certificates. I am credibly informed that amongst the Students that appeared for their Examination in the year 1900—the year in question many of them had never attended one single lecture delivered in the Law School. Comment on such a state of affairs is I think unnecessary.

(10). Before I conclude may I be permitted to add that we are unanimously of opinion that the list of Books recommended to Students preparing for the Second L. L. B. Examination and the Books prescribed for the 1st L. L. B. Examination might with advantage be revised and reconsidered as in one or two cases the Books prescribed and recommended are wholly unsuitable for Students and in other cases other Books could be substituted with greater advantage.

(11). In conclusion and in fairness to the members of the teaching staff of the Bombay Government Law School I beg to assure you that nothing has been left undone by them to make the teaching in the school efficient and useful to the Students and though they regret the unsatisfactory result of the Examination of the year 1900 they beg respectfully to submit that in view of what has been stated above the responsibility of bad results does not rest entirely on them.

I have the honour to be,

Sir,

Your most obediently,

D. D. DAVAR,

Acting Principal,

Government Law School,

BOMBAY.





सत्यमेव जयते

RESULTS, etc., of the 2nd L. L. B. Examinations during the last four years.

Year.	Total number of Students applying to appear.	Absent.	Actually appearing at the Examinations.	Students appearing directly after keeping Terms.	Ex Students apply one two or more years after leaving the Law School.	No. of Students who were successful out of those appearing directly after keeping terms.	Number of those Students who were successful out of Ex Students.	Total Number of successful Students.
1898	219	21	198	74	145	19	23	42
1899	265	33	232	50	215	16	80	96
1900	268	44	224	67	201	18	47	65
1901	261	45	216	51	210	27	115	142

D. D. DAVAR,

1 : 3 : 1902.

Acting Principal,

Government Law School,

BOMBAY.



सत्यमेव जयते

MINUTE BY THE HON'BLE THE LIEUTENANT-GOVERNOR DATED
10TH FEBRUARY 1869.

Since the letters of the Punjab Government to address of Supreme Government, noted in the margin, on the subject of establishing a University at Lahore, were forwarded, I have had an opportunity of discussing the question in person, while in Calcutta, with His Excellency the late Viceroy Sir John Lawrence, Sir W. Muir, Sir Richard Temple and others whom His Excellency had requested to attend. I found that there was a great unwillingness on the part of some of the members of Government, more especially on that of His Excellency himself, to disappoint the wishes, and run the risk of damping the energies of the people of the Punjab, in connection with this important subject—though all were not able to accede to some of the views urged. I was then informed that a letter had been or would be drafted in reply to the above letters, calling for more explicit information and replies on certain points, as it was considered that the Punjab Government had not adverted, with sufficient categorical completeness, to the several observations made by the Supreme Government in their letter No. 558, dated 19th September 1868.

2. I am now, however, given to understand, on authority, that there has been some misapprehension on this point, and that before the Supreme Government takes any further steps in the matter, it is desired to afford this Government an opportunity of stating more clearly, with reference to the remarks contained in the letters heretofore addressed to it, the grounds on which it urges a re-consideration of the conclusions therein arrived at. I accordingly proceed to state my views in this memorandum, so far as I am able, in accordance with the above requirement, deeming it most convenient and appropriate to adopt this form, under the peculiar circumstances of the case.

3. In paragraph 9 of the Government letter, it is remarked that "there is nothing in the circumstances of the Province to justify the establishment of a University *simply for the examination of students*," and this I fully admit. It will, however, be found, by a reference to the letter of the Punjab Government No. 235, dated 27th May, 1868, that while a change in the standard and mode of examining is desired, and examination is considered a necessary function of a University, if established, yet this is very far from being the main object for which the establishment of a University has been desired and urged. Nor has it ever been doubted, that efficient measures for carrying out examinations, in accordance with any standard determined on, might be secured without the creation of the proposed institution.

4. The main objects which the Punjab Government, prompted by the people themselves, has in view are in fact two :—*First*, to give to the leading and most enlightened portion of the Native community a share in directing the educational efforts of the Government, as affording the only means of really popularizing our educational system. And, *secondly*, the creation of a more effective machinery than has heretofore existed for forming a vernacular literature imbued with the knowledge of the West, and creating a series of educational works in literature and science suitable for imparting that knowledge to the rising generation.

5. The *first* of these objects is one of which I believe the Supreme Government entirely approves; and appreciates its importance. I myself desire to see the non-official Native community much more largely associated, than they have heretofore been, in most of the departments of our administration; and towards the attainment of this object much progress happily has already been and is being made. In regard to all that relates to the administration of the laws, much difficulty is experienced, owing to the fact that all classes of the community, whether European or Asiatic, are interested therein; while there exists a strong disinclination to legislate separately for these, or to adopt for the latter a less technical code of procedure than is demanded by the former. In regard to education, however, no such difficulty exists—the subject being one which almost exclusively affects, at all events in the Punjab at the present time, the Native community alone.

6. The educational question may be said to have two aspects; one, the purely intellectual one, the other the national one. The former regards merely

the culture of the individual brought under discipline ; and from this point of view, so far at least as Western learning is concerned, our system has succeeded and is succeeding admirably. The latter regards education as a means of raising a nation into robust and healthy activity, permeating the mass, and bringing all classes into suitable relations with each other. Viewed in this latter aspect, I for one do not consider that our existing system has succeeded or is likely to succeed ; and this because it is of too exotic a character.

7. It is, I think, unnecessary for me to enlarge on this subject, or to adduce instances to show why I have arrived at this conclusion, as I feel assured that the experience of all observant persons must have satisfied them, that all is not as we could wish it to be in this respect ; that the great majority of those most highly trained by us have, by that training, been rendered almost as alien to the bulk of their countrymen, as we are ourselves ; and that the moral effect produced upon themselves has by no means proved altogether wholesome or satisfactory.

8. I believe, and all the principal promoters of this movement believe, that a really salutary effect upon the nation at large, ruled over as it is by a foreign people, can be secured only by regulating our educational efforts by means of a popularized consultative body, such as has been proposed for the Lahore University. In what precise mode the action of this body will tend to produce that result, it would perhaps be difficult to explain ; and I will here only express my conviction that, if allowed free course, it will speedily acquire a vitality and vigor which will enable it to devise and carry out many measures, not heretofore suggested or acted on, towards attaining that end. I believe that the education of no people can be complete, or really salutary to the full extent, unless a prominent share is allowed it in the management of its own social and commercial affairs ; and whereas the aims of the youth at present attending our schools and colleges are almost exclusively directed to qualifying for Government stipendiary employ, I am satisfied that, under the guidance of the body in question, much greater attention will be devoted to qualifying for the performance of municipal duties, and that an amount of eagerness for instruction will begin to be shown in consequence by the bulk of the people—such as has not hitherto been witnessed—as is now the case with the emancipated serfs of Russia, when admitted to a share in regulating their own municipal affairs.

9. If it should be necessary, in consequence of establishing a University of the character advocated, to lower at the commencement the standards to be employed ; none will suffer from this but the Province itself—which is quite prepared to submit to this ; and surely, this being the case, the experiment is worth trying. The admixture of the European element in the proposed Council will sufficiently guard against any recurrence to the practically useless systems pursued heretofore in the purely Arabic and Sanskrit institutions of the country, and I have myself no doubt, that ere long a standard will have been attained, in the higher departments, equal to those of any institution in the land—until which time, there is no desire that the honors conferred here be placed on a par with those conferred elsewhere.

10. The second of the objects proposed by the University, which has been above referred to in paragraph 4, is the creation of a machinery for promoting the formation of a superior vernacular literature. It is true that efforts have been made elsewhere in this direction ; and there is no doubt that some of those educated under our auspices, who have not disregarded the culture of their own languages have contributed and are contributing towards this end. But it cannot I think be denied, that no sufficiently decided and systematic effort has yet been made ; that the result attained is not such as might have been looked for considering the length of time during which we have been educating the people ; and that a large proportion of the works that have been and are being produced are wholly distasteful, if not absolutely unintelligible, to them. It is the fact, that at the present time, so far as our Government is concerned—unless we include the teachers in our schools and colleges, whose time is for the most part fully occupied—no means have been afforded, whereby a literary or scientific scholar can enjoy an independence as such, without resorting to some other occupation for maintenance—unless indeed he possess private means, which is very rarely the case with such persons.

11. This omission in our existing practice it is proposed to supply by establishing fellowships in connection with the proposed University—a measure to which I myself attach very great importance. Fellowships might no doubt be as readily created in connection with any existing University; and now that the élevés of the Tols of Naddia in Bengal are said to be exhibiting a desire for Western knowledge, I should heartily rejoice to see them established in connection with these, as they belong to the class who alone, it may be said, are capable of thoroughly imbuing the mass of their countrymen with an appreciation of the knowledge which they have themselves acquired and learned to appreciate. But as this forms an essential part of the scheme which has been submitted by this Government, I may be allowed to claim the establishment of fellowships, with the other measures heretofore set forth, bearing on the same object, as constituting for the present one of the specialities of the proposed Lahore University.

12. With reference to the remark made in paragraph 11 of the letter of Supreme Government that “the scheme under consideration amounts to a proposal, that the Punjab Educational Department shall be allowed to test the success of its own labors,” I can only repeat, that nothing can be further from the real intentions and wishes of the promoters of the movement than this. It is desired and hoped that the examiners shall on every occasion be obtained from amongst persons unconnected with the Education Department of the Province.

13. In regard to the proposal contained in paragraphs 13 and 16 of the Supreme Government letter, that a joint University for the whole of Northern India be established, an endeavour has already been made in the letter of the Punjab Government, dated 12th November last, to explain what insuperable obstacles stand in the way of carrying out such a project, and I will here only add that, after meeting Sir William Muir, I feel satisfied that he would desire this no more than I do, and that our ideas on the subject of a national education are far from being at present in unison. The whole question, in truth, of directing the education of a Province, appears to me to appertain so essentially to the Government of that Province, under the control of superior authority, that anything which would tend to weaken its responsibility, or fetter its current action, by obliging it to arrange details in consultation with other Governments, must, in my opinion, prove altogether fatal.





सत्यमेव जयते

PANJAB UNIVERSITY.

The Twenty-first Convocation.

THE Senate of the Panjab University assembled in Convocation for the purpose of conferring Degrees at the Montgomery Hall, Lahore, on Saturday, the 21st December 1901.

The Following Fellows of the University habited in the prescribed Academical costume (those who were graduates of this or other Universities wearing the hoods of their Degrees) met in the Reading Room at 11-40 A. M. :—

T. Gordon Walker, Esquire, I.C.S., acting for the *Vice-Chancellor*.

The Hon'ble Mr. W. O. Clark, B.A., *Barrister-at-Law* (Chief Judge, Chief Court).

The Right Reverend G. A. Lefroy, D.D., Bishop of Lahore.

The Hon'ble Mr. P. C. Chatterjee, Rāi Bahadur, M.A., B.L.

The Hon'ble Mr. J. A. Anderson, *Barrister-at-Law* (Judge, Chief Court).

The Hon'ble Mr. F. A. Robertson, *Barrister-at-Law*, I.C.S. (Judge, Chief Court).

R. Clarke, Esquire, I.C.S. (Officiating Financial Commissioner).

L. W. King, Esquire, C.S., B.A., LL.D.

R. A. Gamble, Esquire (Accountant-General, Panjab).

W. Bell, Esquire, M.A.

S. Robson, Esquire, M.A.

Lieutenant-Colonel F. F. Perry, I.M.S.

M. Crosse, Esquire, M.A. (Inspector of Schools).

The Hon'ble Mr. J. McC. Douie.

C. J. Hallifax, Esquire, Secretary to Government, Panjab.

P. J. Fagan, Esquire, I.C.S.

Veterinary-Captain Henry T. Pease (Principal, Veterinary College).

Faqir Saiyid Qamr-ud-din, Khan Bahadur.

Muhammad Barkat Ali Khan, Khan Bahadur.

Khalifa Syed Muhammad Hussain.

Honorary Surgeon Rahim Khan, Khan Bahadur.

Diwan Ram Nath, Diwan Bahadur.

Reverend H. U. Weitbrecht, M.A., Ph. D.

Lala Sanjhi Mal, B.A.

M. Muhammad Hussain, Khan Bahadur.

Assistant Surgeon Brij Lal Ghose, Rai Bahadur.

Reverend J. W. T. Wright, M.A.

Syed Muhammad Latif, Shams-ul-Ulma, Khan Bahadur.

Sheikh Nanak Bakhsh, Khan Bahadur.

The Hon'ble Rai Bahadur Madan Gopal, M.A.

Dr. J. C. R. Ewing, M.A.

M. Inam Ali, Khan Bahadur, B.A.

J. G. Gilbertson, Esquire, M.A.

Reverend H. C. Velte, M.A.

Reverend J. H. Orbison, M.A., M.D.

Lala Lal Chand, M.A.
 M. Mufti Muhammad Abdulla.
 M. Muhammad Abdul Hakim.
 The Hon'ble Nawab Fateh Ali Khan, Kazilbash.
 Hakim Razi-ud-din Ahmad Khan.
 Sardar Arjan Singh Chahal.
 Lala Kunj Behari Thapur.
 Major J. C. Lamont, I.M.S.
 S. K. Rudra, Esquire, M.A.
 T. W. Arnold, Esquire, B.A.
 Reverend H. D. Griswold, M.A., Ph.D.
 M. Muhammad Shafi, Barrister-at-Law.
 C. C. Caleb, Esquire, M.B., M.S.
 M. Fazl Din.
 Sardar Narindar Singh, Sardar Bahadur.
 Lala Hans Raj, B.A.
 Colonel J. B. Hutchinson, C.S.
 Lala Bhawani Das, M.A., Rai Bahadur.
 K. S. Ghulam Muhammad Hassan Khan, B.A.
 A. Turner, Esquire, Barrister-at-Law.
 Lala Jiya Ram, M.A.
 M. Muhammad Hussain.
 Reverend E. F. E. Wigram, M.A.
 Lala Shadi Lal, M.A., B.C.L.
 F. J. Portman, Esquire, B.A.
 Assistant Surgeon Lala Guranditta Mal, Rai Sahib.
 Dr. A. W. Stratton.
 Lala Sundar Das Suri, M.A.

Accompanied by the Principals of recognised Colleges, who were present as guests of the University, they moved in procession at 11-50 A.M. to the platform. His Highness the Maharaja of Jummoo and Kashmir, Raja Sir Amar Singh and the Members of the Maharaja's suite also occupied seats reserved for them on the platform.

His Honour the Chancellor of the University arrived at 12 noon and was received at the main entrance to the Hall by the Vice-Chancellor, the Chief Judge of the Chief Court, the Director of Public Instruction, the Deans of the Faculties and the Registrar of the University and conducted to the dais.

At the request of the Vice-Chancellor, His Honor the Chancellor declared the Convocation open.

The Vice-Chancellor then addressed the Senate as follows:—

GENTLEMEN OF THE SENATE,—Owing to the absence from the country of the permanent holder of the office I find myself once more addressing you from the position of the Vice-Chancellor. The occasion of my re-appearance is a very special one, and I feel it at once an honour and a pleasure to act as your mouthpiece, and to take such a prominent part in the proceedings. We have to-day met for the purpose (in addition to the ordinary duties which fall to be performed at Convocation) of bidding, in our capacity as the governing body of the Panjab University, a public farewell to our distinguished Chancellor, to confer on him the highest honour which it is in our power to confer, and to listen to his parting words of advice.

At a meeting of the Senate held on the 29th of November, 1901, the following Resolution was passed with acclamation.

"That the Hon'ble SIR MACKWORTH YOUNG, M.A., K.C.S.I., C.S., Lieutenant-Governor of the Panjab and its Dependencies, Chancellor of the University of the Panjab, is, by reason of eminent position and attainments a fit and proper person to receive the Degree of Doctor of Literature and that under the provisions of Section 16 of the Panjab University Act the said Degree be conferred upon him *honoris causa*."

This is not the time nor is this the place to review the long and distinguished public career of Sir Mackworth Young. That has no doubt largely influenced the Senate in deciding to confer on him the Academical honour of which he will now be the recipient. In any case it would be useless for me to attempt in the time now at my disposal to do justice to a narrative of his services to the State or of the benefits which he has conferred on the people of this Province. And, although the nature of the assemblage which to-day fills this hall, might suggest something more than a mere University function, it is after all in his capacity of Chancellor that Sir Mackworth Young to-day bids us good bye: while we on our side are to honour him mostly as the man of letters and the friend of education.

Sir Mackworth Young's connection with the University dates from its birth. You will find his name in the rapidly dwindling list of *First Fellows* named in the Schedule to the Act of Incorporation. While holding a succession of important appointments in this Province Sir Mackworth Young has managed to devote much time and attention to the affairs of the University, standing by and aiding it at the most critical period of its existence, until some six years ago he was selected to be its Vice-Chancellor. Translation to another part of India abruptly terminated his tenure of that office; but after a short interval he returned to assume the highest official position in the Province, and, with it, the office of Chancellor of the Panjab University.

While it is a pleasure to us to-day to have the opportunity of recording our recognition of Sir Mackworth Young's great public service and of the special obligations under which he has laid the Panjab University, we must all feel the deepest regret that the time for parting has arrived, and that in future the University will have to look elsewhere for guidance and help. I can only say that I trust he has found his connection with the University, if somewhat onerous, at least as agreeable as it has been to us his fellow-workers. It is almost superfluous to express the hope that he will retain pleasant recollections of his association with us, and I know that, should the necessity arise, we shall ever find him ready to extend to us in the future, as he has done in the past, a helping hand.

The Vice-Chancellor then, with the assistance of the Registrar, conferred the degree of Doctor of Literature upon His Honor in the following words :—

Sir William Mackworth Young, in accordance with the Resolution of the Senate which I have read, I admit Your Honour to the degree of Doctor of Literature, and in token thereof I present to you this Diploma and authorize you to wear the robes ordained as the insignia of this Degree.

The Chancellor then, in accordance with the prescribed procedure, conferred upon the following candidates the Degrees for which they were severally recommended by the Senate :—

IN THE ORIENTAL FACULTY.

(ORDINARY DEGREE.)

Bachelor of Oriental Learning.

Second Division.

Faqir Khuda Bakhsh	...	...	Oriental College, Lahore.
Sundar Das	...	...	Ditto.
Sheikh Muhammad Said Alam	...	...	Ditto.

Third Division.

Labhu Ram	Oriental College, Lahore.
-----------	-----	-----	---------------------------

IN THE ARTS FACULTY.

(ORDINARY DEGREE.)

Master of Arts.

English.

II Class.

Gokal Chand Narang, B.A.	Private Student, Lahore.
--------------------------	-----	-----	--------------------------

III Class.

Tulsi Das, B.A.,	...	...	Government College, Lahore.
Mangal Singh, B.A.	...	...	Ditto.
Bhowani Singh Bhandari, B.A.	...	...	Private Student, Lahore.
Ram Chandra, B.A.	...	...	Government College, Lahore.
Tej Ram, B.A.	...	...	Ditto.
Narendra Nath Koul, B.A.	...	...	Private Student, Lahore.
Radha Kishan Bhatia, B.A.	...	...	Private Student, Rawalpindi.

Physica.*III Class.*

Vaishno Ditta Mall, B.A. Government College, Lahore.

Mathematics.*III Class.*

Piara Lal Dhawan, B.A. Government College, Lahore.

Chemistry.*III Class.*

Chetan Anand, B.A. Government College, Lahore.

(ORDINARY DEGREE.)**Bachelor of Arts.***First Division.*

Ram Chand ...	...	... Government College, Lahore.
Diwan Chand Chadha ...	...	... D. A.-V. College, Lahore.
Fazal Muhammad ...	...	... Government College, Lahore.
Shibbu Mal ...	...	... St. Stephen's College, Delhi.
Arjan Das ...	...	... Government College, Lahore.
Ram Prasad Khosla...	...	... Ditto.

Second Division.

Ratan Lal ...	...	... Government College, Lahore.
Chuni Lal ...	...	... Forman Christian College, Lahore.
Ram Lal Reuri ...	...	... D. A.-V. College, Lahore.
Shah Muhammad ...	...	... Forman Christian College, Lahore.
Hukam Chand Malik ...	...	... Government College, Lahore.
Abdul Ghani ...	...	... Forman Christian College, Lahore.
Niamat Khan ...	...	... Ditto.
Purushottam Lal Dhawan ...	...	... Government College, Lahore.
Diwan Chand Datta...	...	... D. A.-V. College, Lahore.
Indar Bhan Thareja ...	...	... Ditto.
Abdul Hamid ...	...	... Forman Christian College, Lahore.
Muhammad Ishaq ...	...	... Ditto.
Muhammad Bakhsh ...	...	... Ditto.
Mian Narain Singh Katoch ...	...	... Ditto.
Thakar Das ...	...	... Government College, Lahore.
Raj Kanwar ...	...	... Forman Christian College, Lahore.
Munshi Lal ...	...	... D. A.-V. College, Lahore.
Chand Babu Mathur ...	...	... Mohindra College, Patiala.
Surendra Kumar Datta ...	...	... Forman Christian College, Lahore.
Ram Saran Sharma ...	...	... St. Stephen's College, Delhi.
Chela Ram ...	...	... Government College, Lahore.
Hardayal Chopra ...	...	... Ditto.
Deva Dutta ...	...	... Forman Christian College, Lahore.
Bhagat Ram ...	...	... Private Student, Peshawar.
Bakhshi Pindi Das ...	...	... Government College, Lahore.

Barkat Rai ...	...	Forman Christian College, Lahore.
Amar Nath Chopra ...	...	Ditto.
Moti Ram ...	...	D. A.-V. College, Lahore.
Kidar Nath ...	...	Ditto.
Muhammad Shafi ...	...	Private Student, Lahore.
Bishan Singh ...	...	Ditto.
Jagan Nath ...	...	Private Student, Rawalpindi.
Devi Singh ...	...	St. Stephen's College, Delhi.
Sohan Singh ...	...	D. A.-V. College, Lahore.
Dina Nath ...	...	Forman Christian College, Lahore.
Naunit Ram ...	...	Government College, Lahore.
Manohar Lal Puri ...	...	D. A.-V. College, Lahore.
Surender Nath ...	...	Forman Christian College, Lahore.
Jhanda Mal ...	...	D. A.-V. College, Lahore.
Manohar Lal Aggarwal ...	...	Ditto.
Karam Chand Soni ...	...	Ditto.
Jaswant Rai ...	...	Ditto.
Ali Mohammad ...	...	Forman Christian College, Lahore.
Gulam Mohay-ud-din ...	...	Ditto.
D. P. Ghoshe ...	...	Ditto.
Haveli Ram Madhok ...	...	Private Student, Gujranwala.
Anant Ram ...	...	D. A.-V. College, Lahore.
Shankar Das Sondhi ...	...	Government College, Lahore.
Mula Mal ...	...	Ditto.
Nand Lal Madan ...	...	Forman Christian College, Lahore.
Din Mohammad ...	...	Ditto.
Lajpat Rai Sahni ...	...	Ditto.
Narain Das Dhamijah ...	...	Private Student, Lahore.
Balkrishna Shridhar Bapat ...	...	Private Student, Bombay.
Shiv Dat ...	...	D. A.-V. College, Lahore.
Faqir Chand ...	...	Ditto.
Suraj Singh Bedi ...	...	Ditto.
Amolak Ram ...	...	Government College, Lahore.
Ganga Ram ...	...	D. A.-V. College, Lahore.
Narain Das Dargan ...	...	Private Student, Lahore.
Madan Mohan Lal ...	...	Forman Christian College, Lahore.
Niranjan Prashad ...	...	Government College, Lahore.
Prandhone Bannerji ...	...	Private Student, Hoogly.
Tansukh Rai ...	...	Forman Christian College, Lahore.
Ram Saran Das Mehra ...	...	Private Student, Lahore.
Mokand Lal ...	...	Private Student, Hissar.
Nathu Ram ...	...	Forman Christian College, Lahore.
Bheri Ram Kapur ...	...	Private Student, Lahore.
Khadim Ali ...	...	Private Student, Gujranwala.
Lalji Prasad ...	...	Forman Christian College, Lahore.
Girdhari Lal Mullick ...	...	Government College, Lahore.
Shivashunkra Prasada ...	...	Private Student, Lahore.
Sohan Lal Kapur ...	...	D. A.-V. College, Lahore.
Rattan Chand Khosla ...	...	Government College, Lahore.
Sham Shad Ali ...	...	St. Stephen's College, Delhi.
Rang Behari Lal ...	...	Ditto.
Rama Nand Rajput ...	...	D. A.-V. College, Lahore.

Angad Singh	...	...	Forman Christian College, Lahore.
Kalu Ram	...	...	Private Student, Lahore.
Taj-ud-din	...	...	Government College, Lahore.
Sundara Singh	...	...	Private Student, Lahore.
Ram Lal Sharma	...	...	D. A.-V. College, Lahore.
Harbans Lal	...	...	Ditto.

Third Division.

Ganda Ram	...	...	Private Student, Jullundur.
Sham Das Thakur	...	...	Private Student, Mooltan.
Chela Ram	...	...	Private Student, Montgomery.
Khem Chand	...	...	Ditto.
Muhammad Yar Khan	...	...	D. A.-V. College, Lahore.
Bashesar Singh	...	...	Ditto.
Jugal Kishore	...	...	Ditto.
Ram Singh Sabharwal	...	...	Ditto.
Bhagwan Das Mehra	...	...	Ditto.
Baij Nath Kochhar	...	...	Ditto.
Karim Bakhsh II.	...	...	Forman Christian College, Lahore.
Hussain Ali	...	...	Ditto.
Mohammad Nawaz Khan	...	...	Ditto.
Narain Singh	...	...	Ditto.
Rikhi Kesh Thakar	...	...	Ditto.
Nand Lal Taneja	...	...	Ditto.
Malak Ladha Ram Kapoor	...	...	Government College, Lahore.
S. Mohammad Raza	...	...	Ditto.
Sheikh Muhammad Hasan	...	...	Ditto.
Narain Singh	...	...	Ditto.
Mehr Singh	...	...	Ditto.
Jawala Pershad	...	...	Ditto.
Mohammad Hassan Khan Popalzai	...	...	Ditto.
Bhagwan Das Khosla	...	...	Ditto.
Har Charn Das Sharma	...	...	Private Student, Lahore.
Shib Krishna Banerji	...	...	Ditto.
Muhammad Ismail	...	...	Ditto.
Gobind Ram	...	...	Ditto.
Bishan Singh	...	...	Ditto.
Gopal Singh Soori	...	...	Ditto.
Diyal Singh	...	...	Ditto.
Madan Gopal	...	...	Ditto.
Aziz Bakhsh	...	...	Ditto.
Bullo Mal	...	...	Ditto.
Raghubir Chand	...	...	Ditto.
Muhammad Ibadullah Akhtar	...	...	Private Student, Amritsar.
Mohan Lal Bhatia	...	...	Ditto.
Mohan Lal Khosla	...	...	Private Student, Kashmir State.

IN THE MEDICAL FACULTY:

(ORDINARY DEGREE.)

Bachelor in Medicine:

Second Division.

Murari Lal	...	...	Medical College, Lahore.
Barkat Ali	...	...	Ditto.
Chundra Shekhar, B.A.	...	...	Ditto.
A. B. Basu	...	...	Ditto.
Ishwari Prasad Sharman	...	...	Ditto.

IN THE LAW FACULTY:

(ORDINARY DEGREE.)

Bachelor of Laws:

1900.

Second Division.

Amar Nath, B.A.	...	...	Late of Law School, Lahore.
Niranjan Singh Mehta, B.A.	...	...	Law School, Lahore.
Manmatha Nath Mukerjee, M.A.	...	...	Ditto.
M. C. Mukerji, B.A.	...	...	Ditto.
Mehta Girdhari Lal, B.A.	...	...	Late of Law School, Lahore.
Mohammad Sana-ullah, B.A.	...	...	Ditto.
Lakshman Singh, B.A.	...	...	Ditto.
Fakir Chand Vij, B.A.	...	...	Ditto.
Ram Lall Manocha, B.A.	...	...	Law School, Lahore.
Daulat Ram Suchdeva, B.A.	...	...	Ditto.
Khushwaqt Rae, B.A.	...	...	Ditto.
Diwan Chand Ahuja, B.A.	...	...	Late of Law School, Lahore.
Kharaiti Ram, B.A.	...	...	Law School, Lahore.
Chuni Lal, B.A.	...	...	Late of Law School, Lahore.
Narsingh Das Anand, B.A.	...	...	Ditto.
M. L. Rallia Ram	...	...	Law School, Lahore.
Hari Chand Ichhponiani, B.A.	...	...	Ditto.
Barkat Ali Khan, M.A.	...	...	Ditto.
Bal Mokand Trikha, B.A.	...	...	Late of Law School, Lahore.
Pandit Rajendra Prasad, B.A.	...	...	Law School, Lahore.
Beni Parshad, B.A.	...	...	Late of Law School, Lahore.
Ganda Mal, B.A.	...	...	Law School, Lahore.
Badri Pershad, B.A.	...	...	Ditto.
Sheikh Maula Bakhsh, B.A.	...	...	Ditto.
Bans Gopal, B.A.	...	...	Late of Law School, Lahore.

The Degrees having been conferred, the Chancellor directed the Registrar to proclaim them. This was accordingly done in the authorized manner and form, and the roll on which the Degrees were recorded, having been presented by the Registrar was signed by the Chancellor.

The following duly qualified candidates were then presented by the Registrar and received from His Honor the Chancellor diplomas conferring Oriental Literary Titles :—

SHASTRI—HONOURS IN SANSKRIT.

Hari Charn Sharma Oriental College, Lahore.

MAULVI FAZIL—HONOURS IN ARABIC.

Sayad Mubarak Ali Gilani Oriental College, Lahore.

MUNSHI FAZIL—HONOURS IN PERSIAN.

Hira Lal Oriental College, Jaipur.

Muhammad Bashir Hassan Private Student, Jaipur.

Sayed Ali Madrasa-i-Adia Islamiya, Lucknow.

The Registrar then presented to His Honor the Chancellor those persons who, since the date of the last Convocation of the Panjab University, had earned distinction by gaining Medals, Prizes, and Scholarships, stating briefly the claims of each person to distinction.

The names of the Medallists, Scholarship-holders and Prizemen were as follows :—

1.—MEDALLISTS—

1. Alwar Gold Medal ... Arjan Das, Government College, Lahore, for standing first in Sanskrit in the B. A. Examination.
2. McLeod Gold Medal and Purse Arjan Das, Government College, Lahore, for standing first in Sanskrit in the B. A. Examination.
3. Arnold Gold Medal ... Gokal Chand Narang, B.A., Private Student, Lahore, for taking the highest place in the M. A. Examination.
4. MacLagan Gold Medal ... Chetan Anand, B.A., Government College, Lahore, for standing first in Chemistry in the M. A. Examination.
5. F. S. Jamal-ud-din's Medal ... Abdul Hamid, Forman Christian College, Lahore, for standing first in Arabic in the B. A. Examination.
6. Patiala-Sime Gold Medal ... Shibbu Mal, St. Stephen's College, Delhi, for taking the highest place in English in the B. A. Examination.
7. Khalifa Muhammad Hassan Jubilee Medal. Faqir Khuda Bakhsh, Oriental College, Lahore, for standing first in the B. O. L. Examination, provided he has a practical knowledge of English.
8. Khalifa Muhammad Hassan-Aitchison Medal Abdul Hamid, Forman Christian College, Lahore, for standing first in Arabic in the B. A. Examination.
9. Arnold Silver Medal ... Ram Chand, Government College, Lahore, for taking the highest place in the B. A. Examination.
10. Khan Bahadur Shaikh Nanak Bakhsh Medal, Chand Babu Mathur, Mohindra College, Patiala, for taking the highest place in Philosophy in the B. A. Examination.
11. Inayat Ali-Watson Silver Medal Chuni Lal, Forman Christian College, Lahore, for taking the highest place in Political Economy in the B. A. Examination.

- | | | |
|--|-----|---|
| 12. Jaishi Ram Gold Medal | ... | Ch. Mohammad Amin, B.A., late of Law School, Lahore, for standing first in the Licentiate in Law Examination. |
| 13. Jaishi Ram Silver Medal | ... | Gholam Mohyid Din, B.A., Private Student, Lahore, for standing first in the First Certificate in Law Examination. |
| 14. Shrimati Dhan Devi and Shrimati Jai Kaur Medal | | Har Dayal, St. Stephen's College, Delhi, for standing first in Sanskrit in the Intermediate Examination. |

II.—SCHOLARSHIPS—

- | | | |
|--|--|--|
| 1. Fuller Exhibition of Rs. 30-10-0 per mensem. | | Ram Chand, Government College, Lahore, for standing first in the B.A. Examination. |
| 2. Aitchison-Ram Rattan Sanskrit Scholarship of Rs. 24 per mensem. | | Arjan Das, Government College, Lahore, for taking the highest place in Sanskrit in the B. A. Examination. |
| 3. Aitchison-Ram Rattan Sanskrit Scholarship of Rs. 15 per mensem. | | Har Dayal, St. Stephen's College, Delhi, for taking the highest place in Sanskrit in the Intermediate Examination. |
| 4. Prince Albert Victor-Patiala Scholarship of Rs. 18 per mensem. | | Shah Muhammad, Forman Christian College, Lahore. |
| 5. Ditto. | | Hukam Chand Malik, Government College, Lahore. |
| 6. Prince Albert Victor-Patiala Scholarship of Rs. 10 per mensem. | | Zaka-ud-Din Khan, Forman Christian College, Lahore. |
| 7. Ditto. | | Barkat Ram Khosla, Forman Christian College, Lahore. |
| 8. Prince Albert Victor-Patiala Scholarship of Rs. 8 per mensem. | | Gur Saran Das, Government Central Model High School, Lahore. |
| 9. Ditto. | | Ranyodh Sinha, Palampur D. B. High School. |
| 10. Alfred-Nabha-Jind Scholarship of Rs. 14 per mensem. | | Muhammad Zia-ud-Din, Islamia High School, Lahore, for standing first in the Entrance Examination. |
| 11. Bahawalpur Arabic Scholarship of Rs. 30 per mensem. | | Sayed Muhammad Harun, Canning College, Lucknow, for standing first in the Maulvi Fazil Examination. |

III.—SPECIAL PRIZES—

- | | | |
|---|-----|---|
| 1. Rai Sahib Munshi Gulab Singh-Denzil Ibbetson Diamond Jubilee Purse of Rs. 100. | | Gokal Chand Narang, B.A., Private Student, Lahore, for standing first in English in the M. A. Examination. |
| 2. Panjab Science Institute Science Prize. | | Ratan Lal, Government College, Lahore, for standing first in Physics in the B. A. Examination. |
| 3. Brandreth (Leitner) Prize | ... | Muhammad Mussanif-ud-Din, Oriental College, Lahore, for standing first in the Intermediate Examination of the Oriental Faculty. |
| 4. Rai Kanhaya Lal-Pollard Prize | | Qamar Din, Mayo School of Art, Lahore, for standing first in the first Examination in Civil Engineering. |

When all had been presented, His Honor the Chancellor delivered the following address:—

GENTLEMEN OF THE SENATE,—It is matter, I think, for satisfaction that the Syndicate have arranged that this Convocation should be held at a time more convenient for those engaged in collegiate education than has been selected for our recent anniversaries and in a building better able to accommodate the numbers which might be expected to assemble on the occasion. I have heard it said that our proceedings at Convocation are apt to be dull, and though their ceremonial character permits of little variety, and necessitates a good deal of formality, I see no reason why this should not be relieved, as in England, by a certain manifestation of the young life which abounds in our University town. This is not meant as an invitation to you my under-graduate friends to indulge in any particular exuberance, but to show you, the future graduates of this University, that you are welcome here to-day, and that we regard you as an important part of that body politic implied in the term University. And I do not see why I should not invite you, within due limits of order and propriety, to signify your interest in the proceedings by such tokens of approval as you are accustomed to show to your successful representatives on other less formal occasions.

My first duty to-day is to acknowledge the high honour conferred upon me by the Senate of this University in granting me the Honorary Degree of Doctor of Literature. I accept this honour at your hands, Gentlemen of the Senate, with mixed feelings. I fear that I cannot, with due regard to the dictates of conscience, justify your good-will towards me on any grounds of fitness on my part. One sole qualification I possess, that the advancement of the people of this Province in true knowledge lies very near to my heart, and this is also the crowning object of the Panjab University. I accept the honour, therefore, not merely as a valediction, but as a testimony that in this respect I have been faithful to the traditions which as Chancellor I have been called to maintain. And I need not say that it is one which I shall highly value in my now rapidly approaching retirement.

Let me next proceed to congratulate the successful candidates who have to-day received a degree, the imprimature of a University education, and the goal of their hopes and desires. I am not sure that in the day of your triumph you could be expected to listen to anything more than congratulation. You have fought a good fight, and fairly won, and you are entitled to the happiness which lies in success. But most of you learnt the results of your examination long ago, and are graduates practically of some months standing. You have had time to take stock of your position and consider your next step. I could wish that many who have attained to a Bachelor's degree might find it possible to prosecute their studies in the M. A. course. The concentration of mental effort involved in the superior course is of inestimable value to the individual, and is likely to produce results more beneficial to the community. I know that there are considerations which make it impossible for some, and difficult for many more, to spend much time over the foundations of a career. But for those to whom it is possible I will venture to say that it is worth while, and I hope that many of you may find yourselves in a position to study for the higher degree. I shall not say more on this occasion to you, Graduates of the University, who have to-day received your degrees, by way of exhortation. The addresses which have been given at previous Convocations contain much valuable advice to young men who are entering life. Many of them are available to the public in Mr. Thapar's compilation published in 1895, which I hope will soon be brought up to date, and I may perhaps be permitted to say that I have myself nothing to add to what I said on this subject in my first Convocation address in January 1898 and to what has been said by others on similar occasions. Let me ask you to read those addresses, and may God help you to lead pure, useful and happy lives. To each of you I would say

“macte esto virtute puer, sic itur ad astra,”

not the Star of India, beautiful of renown though it be, but the heights of heavenly wisdom and knowledge which transcend all earthly distinction.

Now, as this is the last time I shall have the honour of addressing the Convocation in the capacity of Chancellor, it will perhaps not be out of place if I review briefly the principal measures which have been adopted by the Senate during the last five years.

The revision of the regulations for the Medical Examinations is an important reform. The standard of general education required from students entering the Medical College has been raised. The subjects of the First L. M. S. and M. B. Examinations have been divided between two separate tests at a year's interval, with the object of enabling students to prepare themselves more thoroughly in those branches of Natural Science with which their professional training is most closely connected. This must have a far-reaching effect on the training of the Medical College and must enhance the value of the Panjab Medical degrees. And, in spite of these stricter requirements the numbers in the College have been steadily maintained, a satisfactory feature in view of the growing requirements of the country in connection with matters of public health and sanitation.

Nor is it only in Medical studies that the University has shown itself alive to the importance of scientific studies. The standards of examination in Science, both in the Arts and Science Faculties, have recently been revised, and the Entrance and Intermediate Examinations in Science, first held in 1898, are becoming every year more popular. High Schools are much better equipped with the necessary apparatus than they were some years ago, Biology has been introduced into the Forman College, and I have just sanctioned its introduction into the Lahore Government College, which has recently been provided with a handsome chemical laboratory in addition.

The Law School has been thoroughly re-organised and converted into a college. An English Barrister-at-Law and graduate of Oxford University has been engaged as a whole time Principal. Three additional Law Lecturers have been appointed. The control and supervision of the work of the College have been entrusted to a Law College Committee with the Vice-Chancellor as President. This Committee supervises the tuition, the selection of courses of study, and all other important matters connected with the working of the institution. The staff is also under the orders of this Committee. These arrangements provide for a larger number of lectures than before, and ensure efficiency and discipline. The danger, apprehended by Sir Dennis Fitzpatrick, in 1896, of turning loose a host of imperfectly trained practitioners has been averted, as is evident from the fall in the number of students in the past two years. A decidedly better class of practitioner will now go out from the College into the Courts of Law.

One important measure of University reform has been the revision of the regulations regarding admission of private candidates to the various University examinations. The restrictions now imposed have done something to improve the discipline of our schools and colleges by preventing the appearance of those “pseudo-private candidates” who set regulations at defiance, while in no way injuring the best interests of those genuine private students for whom the University has from the beginning shown a sympathetic consideration. In the past a private candidate has often been merely a student who had not studied long enough or diligently enough in a recognised institution, and the revised regulations will greatly help the heads of institutions in maintaining discipline and a high standard of regularity and diligence among the students.

Though these reforms are not of striking importance in themselves, they indicate a steady advance on approved lines which time and further developments will justify. The Punjab University, in common with the other Universities in India, is about to be subjected to a scrutiny which will surely find out the weak joints in its harness. It is well that in the earlier chapters of its history, when it had made something of a false start, it was subjected to the scrutiny of so keen a critic and so true a friend as Sir Charles Aitchison, whose name will always stand in honour in connection with the cause of education in this Province; and that it has reckoned among its Vice-Chancellors men like Mr. Baden Powell, whose recent death many of us deplore; and Sir William Rattigan, whose election to Parliament is a fitting crown to his industry and ability. Guided by such minds this University has avoided some of the rocks and shoals which lay in its course, and is, I venture to say, fulfilling the purpose for which it was called into being. It is in advance of other Indian Universities in having a teaching side; its governing body, the Senate, while it contains most of the scholastic experience and ability of the Province, is neither unwieldy nor erratic; its standard of examination is maintained at a high pitch, and its relations with the Educational Department are harmonious. But it has still many needs, [and with your permission I will briefly refer to some of them.

I put first the need of some method of regulating the standard of examinations. I give special prominence to this subject because I cannot conceive anything more demoralising to persevering study or disappointing to laborious training than sudden fluctuations in the pitch of the examination tests. In the appraisement of scholastic merit, which constitutes one of the most weighty responsibilities of a University, the introduction of the least element of caprice amounts to a grievous wrong, and is felt as such by the community. And it is almost inevitable that there should be unevenness, if the setting of the papers is left entirely in the hands of single examiners without any standard test. Further, it seems obvious that this test should be applied before and not after the papers have been set. A custom, I believe, exists in regard to some of our examinations, of permitting a re-examination in cases where the papers are subsequently discovered to have erred in scope or in pitch. I have not cared to examine the authority for such a procedure, nor the frequency with which it has been adopted. I am convinced that it is a very poor way of repairing a mistake which ought never to occur. It should be a simple matter to devise a precautionary measure which would render such patch work unnecessary. I am quite unable myself to admit that it will be impossible to prevent the papers from leaking out, if a second pair of eyes passes over them before issue, and I believe that in the appointment of moderators lies the only remedy to fluctuations in the standards. I commend the consideration of this subject most earnestly to the Senate.

The next need is more method in the matter of affiliation and recognition of colleges and schools. The Government Educational Code contains certain rules designed to prevent piracy of children and a Dutch auction of educational advantages, known as the inter-school rules, the observance of which is required by schools receiving grants-in-aid from Government. The Government makes use of its functions as almoner of the educational purse to enforce the salutary provisions of these rules. In the struggle for existence among schools in large centres they are absolutely necessary, and as education spreads they will be more and more brought into play. The Panjab University occupies, in respect of collegiate education, a far more authoritative position than is held by the Panjab Government in respect of aided schools. It dispenses the rewards and honours which crown the student's course. And the institutions with which it is concerned require no less than the schools which I have mentioned to be subjected to rules of comity in order that schools and colleges maintained by Government and by private effort may flourish side by side. Yet I find no rules for affiliation or recognition in the Panjab University Calendar, and I trust that this deficiency will soon be supplied. I believe I am correct in saying that in this matter we are behind other Provinces, and I am aware that our slackness in this respect is causing harm and affords grounds of complaint on the part of deserving institutions.

The next need is the development of boarding houses in connection with the institutions maintained by the University. The Oriental College has its boarding house. Not so the Law School, for which the University is responsible, or the Medical College, which is a Government institution. For both of these a boarding house is a crying want. I do not think it is too much to say that half the value of the teaching is lost in institutions of this class, unless the technical education is supplemented by the indirect training and discipline of corporate college life. It is perhaps in this respect mainly that it is open to us to secure for the students some of the well-known beneficial effects of the English universities. The boarding house system presents many difficulties, and it has hitherto been on its trial in the Panjab. But enough experience has been gained to show that with proper supervision it is of inestimable value, and there are I am sure no institutions in the Province which will reap greater benefit from it than those I have mentioned. I hereby record the necessity for a boarding house in connection with the Medical College, to be erected by Government, and I call upon you, gentlemen of the Senate, to recognise a similar need in respect of the Law School.

The next need of which I would speak is greater literary activity. I need not remind you that "the improvement and extension of Vernacular literature generally" is one of the objects for which the Panjab University exists. But what has the University done in this respect? Very little, I fear. It has during the last few years revised the Vernacular Readers on the lines of the departmental text books. But while availing itself of the labours of the Government Text-Book Committee, of which I cannot speak too highly, I doubt if it can claim to have originated any work or devised any scheme for discharging the important duty imposed upon it by statute. And it is the more incumbent upon it to do so, because without a Vernacular literature to serve as the exponent of European scientific progress, it must needs fail in respect of another of its statutory duties, *viz.*, "the diffusion of European science, as far as possible, through the medium of the Vernacular languages of the Panjab." In looking about for a reason for this failure, I apprehend that it is to be found mainly in the lack of leisured study, in which our English Universities and homes abound. Few are the favoured ones who are able, and few are the wise ones who care, to refrain from the pursuit of wealth or fame and seek knowledge for its own sake, or for the sake of imparting it to others. How earnestly I wish that I could fire some of you, my younger friends, with a noble ambition to adopt as your own this prerogative of your *Alma Mater*, to become yourselves means of diffusing true knowledge through the medium of the Vernacular, either by the translation of standard English works, or, better still, by becoming yourselves aglow with inspiration and telling in your native tongue of the things which you know and feel.

And in connection with this idea, let me gently remind you that learning and religion in this country seem in danger of being divorced, judging by the number of graduates who find employment in religious work. Of those who pass through our English Universities a fair proportion devote themselves to the direct service of God, but few graduates in this Province become teachers of the creed they profess or seekers after religious truth. Will you not seriously consider whether some of you may not be called to devote your lives to this search, and follow in the footsteps of men like Keshab Chander Sen, Dya Nand Saraswati, and Sir Syad Ahmad Khan, whose influence on the educated youth of India has been so potent and so beneficial. It is a noble ambition to become fellow workers with God, and to help your fellow-creatures forward in spiritual things, and true pursuit of the highest wisdom. But the true reformer must be first a deep student, and what I wish to suggest to you now is that the search for truth for its own sake and for the sake of mankind is a fitting employment for faculties which like yours have been quickened above those of your fellows.

One more need I must mention, a material one. We greatly need a building for the purposes of the University. With the exception of the Senate Hall, erected 27 years ago by the Nawab of Bahawalpur, we have no material embodiment of the University organism. And it is not a mere sentiment which leads me to say that it is much required. A fine building is a great assistance to the maintenance of associations and traditions which are essential to University life, but apart from this, a Convocation Hall, a Library, Examination Halls, and Lecture Rooms are very real requirements, and the absence of them is a great hindrance to our development. In connection with this subject I venture to suggest that the whole subject of University lecturers is one which might well be considered. The Senate is empowered by statute to appoint professors and lecturers in connection with the University, and there are subjects particularly suitable for lectures under its patronage; I may mention the science of Teaching, Hygiene, History, Political Economy, and possibly Morals. It is one of the drawbacks of our Indian Universities that they fail, owing to the want of common surroundings, and local traditions and institutions, to leave upon their students that impress which is derived from association in the case of the great English Universities. To some extent this want would be supplied by the University lecture room, especially if it is accompanied by the other circumstances I have mentioned, a fine building, a library and examination halls, to which I should like to add space for the University sports tournament which is doing excellent service in preparing the way for some degree of unification in the interests of the many colleges affiliated to the University. I shall conclude this address by drawing the attention of the wealthy in this Province to the great public benefit which would result from their devoting a portion of their superfluity to the erection of University buildings, the acquisition of grounds for sports, and the endowment of lectureships and professorships. The Panjab University owes its existence to the liberality of the Ruling Chiefs, and I should rejoice to see its further development brought about by a spontaneous exhibition of similar generosity.

I have now briefly alluded to the recent reforms adopted by this University, and to its most pressing wants. It only remains to me, in the near prospect of laying down the office of Chancellor with which in virtue of my official position I have been honoured, to express my regret that I have not done more for its welfare, and my earnest hope that it may progress and flourish in the future. That this will be the case I can hardly doubt. I rejoice to think that the Senate reckons among its members so many who, at some sacrifice to themselves, are devoting time and thought to its best interests, who are working together for a common object with the utmost harmony, and who have at heart not merely the cause of education, but the people's good. That your labours may have abundant fruit, and that you may be guided in all your counsels to a true judgment, is my earnest hope, and in that hope I now bid you and this Convocation farewell.

At the conclusion of the address, His Honor the Chancellor declared the Convocation closed.

His Honor was then conducted by the Vice-Chancellor and Fellows to the main entrance and took his departure,

By order, &c.,
A. W. STRATTON,
Registrar.

